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A psychiatrist, clinical psychologist, and a social worker each made independent case studies of each of 300 children equally divided between the second and fifth grades. Two objectives were kept in mind: (1) making an accurate prediction of the child's adjustment to school and (2) trying to devise a useful set of criteria upon which consistent predictions could be made on a scale ranging from good to poor school adjustment. Students were rated by their teachers on a specially devised classroom "adjustment grid." A representative cross-section of these students were then selected as experimental subjects. Only about six students were chosen from any one teacher's class. Appropriate statistical techniques were utilized in analysis of the variance between the predictions of the experimental workers and the actual classroom adjustment as rated by the teachers. The data reported lent strong support to the ability of the social worker, clinical psychologist, and psychiatrist to predict adjustment status of school children. These abilities are especially strong when utilized in a team situation.

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Education Research Project Consultant

California State Department of Education
Max Rafferty, Superintendent of Public Instruction
SACRAMENTO OCTOBER, 1964

THE PREDICTION OF SCHOOL ADJUSTMENT

Cooperative Research Project No. 1980

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The Prediction of School Adjustment

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INTRODUCTION

The files of school guidance offices and of child guidance clinics are bulging with the case records of the countless children who have been referred to them for help. In spite of this surfeit of data, rarely is there effective feedback to the pupil personnel worker or the clinician about the usefulness of their observations. Consequently, most pupil personnel workers and clinicians are forced to function with assumptions which are essentially unproven. Of cardinal importance is the need to test some of these underlying assumptions in the school mental health field. By testing these assumptions it may become possible to evaluate and refine clinical procedures and cast out those which are neither descriptive nor predictive of school adjustment.

In spite of criticisms leveled at the Stanford Binet IQ, this hoary perennial has withstood the test of time and the attacks of its detractors because it continues to be a usable instrument and to yield data from which predictions can be made. In the case of the Binet, there generally has been feedback to the test-giving person from the teacher - usually a report on the student's observed classroom achievement compared with his test-indicated ability. Because of reciprocal communication of data from psychometrist to teacher, both the psychologist and the educator have come to have confidence in the Stanford-Binet and consider it useful in the estimation of some kinds of school abilities and school learning. However, there are few parallels to the Binet follow-up in dealing with other data in the pupil personnel field. For example, what is the established validity for the information contained in the developmental history, health facts, the social environment (including socio-economic status) and personality information for predicting the child's school adjustment?

Conducting clinical evaluations from a sample of a typical school population is both extremely expensive and difficult. However, in the establishment of criterion groups for the United States Office of Education Cooperative Research Project Number 1186 (Lambert, 1962) clinical data were collected on 300 elementary school pupils randomly sampled from teachers' ratings of school adjustment status. Criterion groups of pupils with good to poor school adjustment were subsequently established by clinical teams to validate a screening process designed to locate emotionally handicapped children (Bower and Lambert, 1961). A by-product of this project was a body of comprehensive clinical data on each pupil, which the clinicians used to make the criterion judgments of good to poor school adjustment.

The material in this report is designed to capitalize on an unequaled opportunity to evaluate clinical procedures commonly used to determine the nature of a child's adjustment problems. The samples of pupils on which the data were collected covers a wide spectrum of school adjustment and emotional problems. Therefore, it is possible to analyze clinical and school data on 7 and 11 year olds to determine the frequency of clinical signs commonly used as diagnostic indicators and to compare these data against indices of school adjustment. The goal of this investigation is to determine the value, if any, for the prediction of school adjustment on the basis of information easily available from the school, from the family case work interview, from scores and judgments derived from psychological testing, or from interview observations of psychiatrists.

BACKGROUND AND THEORETICAL FRAME OF REFERENCE

The term "school adjustment" is frequently used, but infrequently defined. School adjustment naturally calls to mind the extremes of the concept - poor school adjustment or good school adjustment, school maladjustment or school adjustment. In spite of a lack of definition and a paucity of techniques of measuring the variables which place a pupil at one point or another on the continuum (assuming now that the distribution of school adjustment is continuous), the effects of poor school adjustment is one of the nation's more serious social problems as attested to by newspaper stories and articles in periodicals.

The effects of poor school adjustment as, here defined by problems with teachers, problems with peers, poor grades and inadequate motivation are related to job success as an adult, and are the precursors of more serious problems in later life. The pupils whose adjustment is judged to be poor by teachers are the ones who later earn unsatisfactory grades and manifest behavior problems. In addition, (Lambert, 1964) it has been shown that they tend to become the juvenile delinquents, the high school dropouts and the marginal adults.

School adjustment problems like other human difficulties which are characterized by failure to meet effectively the demands of living are often lumped into the category "mental health." This term conveniently includes almost all of the definable human problems with which the behavioral scientist sooner or later must deal. "School mental health" is a term often used to describe adjustment and maladjustment in the school setting. It covers all types of pupil problems from those having to do with difficulties in interpersonal behavior, school learning, problems with authority, autism, vandalism, neurotic behavior, school phobia, inadequate motivation, to such factors as poor nutrition, cultural deprivation, and the like. When a research investigator begins his investigations of a particular problem related to this large nebuluous area of school mental health, he is confronted with an immense task of defining terms, measuring the variables and treatments which are the focus of the research and subsequently describing his work in a frame of reference which has meaning for the users of the results. Often he cannot manage such a task, and seeks a solution by side-stepping a research definition of mental health or school mental health with appropriate descriptions of the independent and dependent variables, and turns to an easily defined population with a ready-made operational definition. Thus, as Scott (1958) has pointed out in his survey of the field of mental health research, definitions of mental health such as the following are commonly used in research investigations:

1. Maladjustment determined statistically by references to norms of the society for rates of alcoholism, suicide, addiction, criminality and so forth.
2. Mental illness defined as exposure to psychiatric treatment.
3. Mental illness defined by psychiatric diagnosis.
4. Mental illness defined by objective psychological symptoms, either in terms of self ratings or by other test and rating procedures.
5. Mental health defined as the report of subjective well being.
6. Mental health defined as a positive striving.

Thomas Szasz's article in a recent issue of Harper's (1964) points out that the person whom society defines as mentally ill is usually so defined by those around him. He is committed to a mental hospital, not because the treatment provided there will cure his ills, but because commitment is the most convenient way to rid the group of the nuisance or menace of his abnormal behavior. Few people in mental hospitals, as Szasz points out, commit themselves. Though the source of referral to the private practitioner may be frequently a self-referral, it is reasonable to assume that the subjects of much of mental health research are those who have been brought by someone, or sent by someone for a confirming diagnosis of their abnormality or need of care.

Such subjects make a convenient sample for research, and once the obvious nature of their difficulties is known, it is a fairly easy task to define the most probable etiology of the problem, and fit their symptoms into one or more classifications of abnormal behavior.

Thus we know most about people who have caused others difficulty or discomfort. The research in the field of "school mental health" has been concerned largely with descriptions of referring problems of child guidance clinics, the outcome of therapy and re-education for those identified and assigned for help, and the frequency of classifications of symptoms into nosological groups. Our understanding of the causal factors related to school mental health problems has come from a study of the variables related to such rather easily defined categories. We know very little about the rest of the population.

It would be quite unfair to criticize researchers in this field for their failure to define better the variables affecting "school mental health" at different points on a continuum from good to poor, or failure to study children in groups other than the "referred for help" category. What has happened in the scientific investigations in the field of mental health and school mental health is that concepts and terminology which are the subject of the research investigations have developed along with the developments in the field of personality theory and the behavioral sciences as a whole.

During the first third of the twentieth century the field of abnormal psychology and personality theory were concerned primarily with classification and etiology. A study of abnormal psychology was focused on the classification of behavior into categories such as neurotic or psychotic and functional or organic. Personality theory was concerned with descriptions of individual differences and the subsequent development of methods for testing some of the more obvious behavior dichotomies such as introversion-extroversion, aggressive-withdrawn, ascendant-submissive. Theories and schools of personality developed such as the phenomenology of Snygg and Combs (1949) and the psychodynamics of Freud.

In all of these theoretical inquiries and the investigations designed to study them, the emphasis was on cause and effect and not on describing a continuum of behavior from good to poor mental health, from healthy to unhealthy personality, from adjusted to maladjusted. With the emphasis on unconscious motivation and instinctual drives as proposed by Freud, a popular approach was to view everyone as a "little bit sick" at sometime or other. The pathology focus of psychiatry and psychology reinforced such observations. Meanwhile, the need to find out more about the population as a whole continued until the present time when the problems of mental health are second to the national defense effort in terms of costs to the taxpayer in maintaining custodial institutions, relief and social welfare programs, and unemployment payrolls, not to mention absenteeism, employee failure, accidents and other social problems.

For some time it has been obvious that two people with similar good and poor resources, attributes and experiences may use these raw materials in quite different ways to adjust to the demands of their environment. A handicap may be an emotionally crippling factor to one person and a motivational boost to another. It is apparent that the difference between the use of comparable resources has to do with differences in individual abilities to organize and utilize these basic supplies to meet the life situation. By proposing a construct of an administrative or executive aspect to personality it is possible to evaluate a life adjustment or mental health continuum on the basis of defining the psychological supplies which are available from the environment and from the individual and next to study the ability of the individual to use these supplies in meeting a specific developmental crisis or environmental demand. Such an ability may be analogous to an energy or drive variable in learning theory which provides the movement to solve problems and establishes a hierarchy of trial and error choice, or the types of ability belonging to the behavioral domain of Guilford's structure of Intellect (1956).

One large body of theoretical writing which focuses on this executive or administrative aspect of the personality belongs to the contemporary school of "Ego Psychology," a branch of Freudian psychodynamic psychology. In this school of personality theory the term "ego" is used to refer to the ability of a person to organize and integrate his experiences. The individual with considerable ability in this dimension would be referred to as having "good ego strength" and the person with minimal abilities described as having "poor ego strength." Some of the concepts from this school of personality theory are useful in describing further the psychological supplies necessary for good adjustment, and some of the variables which are related to the capacity to organize and integrate these supplies to meet the life situation.

The most significant contribution to our understanding of personality development made by a single individual is no doubt Freud's development of psychoanalytic theory. Freud's early work was concerned primarily with the more primitive aspects of personality such as instinctual drives and unconscious motivation. Even though concepts of the ego, or this executive aspect of personality entered his work, Hartmann (1964, p. 113-114) suggests that it was not until the decade of the 1920's that Freud explicitly postulated ego psychology as a chapter of analysis. Until the development of ego psychology, Rapaport (1951, p. 364) points out that psychoanalysis considered the "details of the psychological superficies with which the various branches of psychology concerned themselves were to be reduced to the unconscious drives and the defense processes underlying them." This was partially related to the fact that the field of psychoanalysis so often developed directly from Freud's writing. Thus, the development of ego psychology, per se, waited for Freud's introduction of its basic concepts. In Hartmann's discussion of ego psychology as a branch of ego psychoanalysis and personality theory, he defines the "ego" in terms of how it functions for the development and maintenance of personality integrity (Hartmann, p. 114-115):

> "The ego organizes and controls motility and perception -- perception of the outer world, but probably also of the self...;it also serves as a protective barrier against excessive external, and in a somewhat different sense, internal stimuli. The ego tests reality. Action, too, in contradistinction to mere motor discharge, and thinking...are functions of the ego. In both is implied an element of inhibition, of delay of discharge. In this sense many aspects of the ego can be described as detour activities; they promote a more specific and safer form of adjustment by introducing a factor of growing independence from the immediate impact of present stimuli...it appears that a large sector of the ego's functions can also be described from the angle of its inhibiting nature... The function most extensively studied in analysis, namely defense, is a specific expression of its inhibiting nature. Another set of functions which we attribute to the ego is what we call a person's character. And still another one that we can conceptually distinguish from those mentioned so far is the coordinating or integrating tendencies known as the synthetic function. These together with the differentiating factors... represent one level (not the only or the earliest one) of mental self regulation in man."

Caplan (1961, p. 34-36) further describes the ego and its functions. He divides ego functions into six main categories. They are summarized as follows:

1. cognition - seeing, hearing, knowing, receiving stimuli from the outside world as well as from the inside world of the rest of the personality.
2. selection and integration - selecting and integrating stimuli once they have been recorded. New stimuli are integrated with record of past stimuli, with memory, and thus they are invested with meaning.
3. planning - planning for problem solving. The whole complicated set of operations involving planning and deciding what one ought to do about the problem forms an important part of ego functioning.

4. control - implementing a plan by control of motility and control of impulse.
5. synthesis - synthesizing experience in order to produce an equilibrium not only with the forces inside, but with the forces outside oneself. "Synthesis is one of the most interesting aspects of the ego, because what you see in a personality is a certain identity, a certain cohesiveness, and a certain predictability. This consistency is a very special part of ego functioning. It is the aspect of the synthesizing function which produces the identity of the person. Identity is something that can be perceived by others and from which also one has a sense of oneself."
6. object relations - establishing relationships with other people and things.

Whether one accepts the term "ego" or prefers some other term, a basic assumption in personality theory is that there is an aspect to personality which directs, selects, integrates and manages the internal and external forces of living. Ideally, one is continually moving to new levels of development and higher degrees of personal management. When this does not happen and breakdown occurs, it is necessary to look for the cause of the difficulty in terms of the existence of the internal and external supplies to solve the problem as well as the ability of the individual to use these supplies effectively. It is possible to make lists of the external supplies in the environment which are necessary and desirable. It may also be possible to infer the capacity for the integration of experience by attempts at measuring Hartmann's or Caplan's or some other list of functions of the ego. With such constructs, it may become possible to define a population on continua of available supplies and functioning abilities. The assumption follows that the person with more adequate psychological supplies has a greater potential for adjustment than a person with fewer supplies, and that a person with greater ego capacity, or more adequate functioning abilities, has a greater potential for adjustment than a person with less adequate capacity. Obviously, these two continua are dynamically interrelated and defects and attributes in either continuum can balance out one another.

Implied in such a frame of reference is the popular concept of coping ability. The ability of an individual to cope with his environment depends on learning and maturation as well as on genetic characteristics. The idea of coping was originally bound up in the psychoanalytic concept of defenses against attack on the personality structure, but as psychoanalysis progressed, the concept of coping crept more and more into the literature as a mechanism of the ego and thus a concept of ego psychology. When the terms "coping" or "coping efforts" are used, Murphy (1962) points out that we are not dealing with a concept which has an established theoretical lineage. Many psychologists have used the term in the context of the individual's failure to cope with certain external difficulties or with his problems. The psychological defenses, while coping mechanisms basically, are also the mainstay of the personality when coping fails. Both defenses which are too rigid and those which are too weak, would indicate an inability to cope or difficulties in coping. The concept of coping as used in the literature does not include universal patterns such as sucking reflexes, or general capacities of the human such as those called for in vocalization or locomotion. Coping devices as described by Murphy involve individual choices in ways of using the basic resources and new structures and integrations developed by the individual to master his personal problems with the environment.

With the concept of coping has come a de-emphasis of defense mechanisms such as regression, rationalization, projection, intellectualization, etc., as essentially "bad" for the individual. On the other hand, insufficient defenses have become a more malignant sign, and defenses, whatever type, are evaluated in terms of their effectiveness in serving the individual and his reality.

With the postulate of coping ability and the identification of the necessary psychological supplies, it is possible to set up criteria and establish a continuum of school adjustment for good to poor. The fewer the psychological supplies, the more limited the pupil's choices in selecting and integrating particular behaviors to fit a given school situation. In other words, the more behavioral options, the more freedom of choice; the greater flexibility, the greater potential for adjustment. It is postulated here that school adjustment as a particular dimension of school mental health or mental health, is dependent upon the degrees of freedom an individual has in choosing from among alternative kinds of behavior. Conversely, school maladjustment, or mental disturbance, results from individual behavior which is limited, inflexible and restricted. Such limitations or restrictions serve to reduce the individual's relative freedom of choice in social and educational endeavors. The reduction of personal maneuverability and flexibility in a changing environment increases the individual's difficulties in adapting to the pressures and changes of life. As a result, the pupil with limited degrees of freedom, lowered coping power, therefore potentially poorer mental health, shows increasing susceptability to behavioral difficulties and interpersonal friction.

The concept of amount or degrees of freedom can also be applied to the social or community environment in which the individual resides. A socially healthful environment is one which presents to the individuals in it a variety of choices of behavior which will satisfy physical, social and psychological needs. The variety and extent of alternative behavior may be restricted by community factors as well as by personality or psychological factors. "Freedom" may be relatively the same for a child living in an impoverished home in a slum area as it is for a child from any kind of home, who is weighed down by emotional conflicts. For the former child, the environment is the primary source of the restrictive and inflexible behavior; for the latter, the primary source is related to restrictive and inflexible emotional forces within the personality of the child himself.

In most individuals, emotional problems and anti-social behavior are the result of the combined forces of environmental and personality components. Any dichotomy of social and individual freedom is a verbal construct rather than a state of nature, for the human organism lives and exists in an environment. Adverse factors in the social environment act on the organism in combination with limitations emanating from the individual. Such a dichotomy can be useful, however, in studying the problems of human behavior. Specifically, the child with poor mental health manifested in poor school adjustment is defined as having moderate to marked reduction in behavioral freedom, which in turn, reduces his ability to function effectively in learning or working with others. In the classroom, this loss of freedom can be noted in the child's educative and social experiences and results in a susceptibility to one or more of these five patterns of behavior: an inability to learn which cannot be adequately explained by intellectual, sensory, neurophysiological, or general health factors; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate or immature types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; and a tendency to develop physical symptoms, such as speech problems, pains or fears associated with personal or school problems.

THE RESEARCH PROBLEM

Most of what is known about the characteristics of children with school adjustment problems has come from the analysis of records of children with known school difficulties, not from an analysis of the characteristics of the general school population. While those children who are brought by their parents to clinics or referred for study within the school setting may, indeed, present adequately the problems experienced by all children with adjustment difficulties, this may or may not be a correct inference. In addition, the causal relationship of cognitive abilities, social status of the family, interpersonal relationships and parent-child relationships to the school adjustment of all children has been inferred from the observations and relationships between these factors and adjustment for those children seen in clinics. Whether such factors present in a non-clinic population have the same relationship to adjustment in the total population can only be surmised. The pupil personnel worker in the public school is often faced with the problem of wondering whether research on clinic populations should be applied to the cases he sees in the school setting. Since there are few, if any, normative standards for his interpretations, the pupil personnel worker must describe the child's day-to-day difficulties, make chary predictions, and hope that his prognostications will stand the test of time.

During a 1959 pilot study (Lambert) of the test characteristics of pupils with school problems, it was apparent that some of the evidence from the psychological test setting commonly thought to be indicative of personality difficulties were found in the records of pupils without school problems. For example, shyness, some withdrawn behavior, and terse answers were found in the "normal" group, while verboseness, brashness, and eagerness to participate were found in the "problem" group. Such findings lead the workers to conclude that an appropriate degree of self control manifested in test behavior was one of the characteristics of pupils with few difficulties. Actually some of these pupils could be described as "over-controlled," a characteristic often considered typical of a child with mental health problems.

Psychiatrists faced with the task of determining the seriousness of a referral problem often must rely heavily on the school history and other behavior signs to evaluate the data collected during the interview situation. They, too, have few perceptual guidelines which can be used in comparing a referred pupil to those in the school population at that age level. One of their problems in clinical evaluations is that when only those children with known problems are referred, there is a tendency to deal with all cases as if everyone is "sick" to a degree and needs help. Thus when they start from the pathology end of the continuum, every sign observed is likely to be labeled pathology. Consequently, shyness and terseness, instead of being healthy signs in a "problem child" are read as being part of his difficulty.

The school social worker calling on a family for attendance follow-up or in answer to a teacher referral must often ask herself "to what degree is this sort of family situation related to the child's difficulty in school?" Social workers may magnify "poor housekeeping" or "working mother" making them appear as the variables producing the child's problems, when in actuality, these might be the signs of health in an otherwise problem family. In addition, many of the established procedures for the social case work history may be irrelevant to the condition necessitating the referral.

The task in this research study is to determine the value, if any, of inferences from social case work histories, scores from psychodiagnostic testing, observations of behavior during psychological examinations, and psychiatric observations and appraisals in the prediction of school adjustment. The final product should contain a procedure for the social case work interview, the psychodiagnostic examination, and the psychiatric appraisal of the child in the social setting. In order to evaluate these procedures for diagnostic evaluations of school age children, it will be important to point out during the progress of this report to what extent the diagnosis must be based on a composite of all information (an additive approach), or to what extent total judgments should be a result of collaboration (a weighing approach) - the general rule in clinic procedures.

OBJECTIVES

Three kinds of clinical data have been collected and will be analyzed on 300 pupils, 150 at 2nd grade and 150 at 5th grade. Each worker collected his information and rated it independently of the others. The social worker paid a visit to the home to interview the child's mother; and the psychologist and psychiatrist next saw the child at different times at school. Objective or quantitative data are the first type. These have been collected from the work of all of the clinical disciplines. Such objective data are exemplified by test scores from the psychological examination. Interview observations are a second type of data which will be studied. These are ratings of specific characteristics of interview behavior or classifications of social data such as type of home and occupation of principal wage earner. Parameters are not available for this second type of data, but the ratings which are required can be replicated from this study to another. The third type of data are subjective or qualitative evaluations. These, to be defined operationally, consist of the usual judgments made on cases referred to the school guidance office or to private agencies. Qualitative judgments require inferences made from behavior observed during interviews, test scores or parent reactions to his child's development and school work. In order to make such judgments the clinician just compare his many perceptions of the child or parent weigh information which he has collected and come to a conclusion about how a particular child should be ranked among his peers in terms of critical behavioral variables. Such judgments can be replicated only if the procedures and the criteria which are used are made explicit.

A general objective of this project is the analysis of these quantitative, observational and qualitative data to discover which clinical information or patterns of information are most predictive of pupils with poor school adjustment. From the results suggestions for the use of such data will be made as a procedural guide for the pupil personnel team to use in diagnostic work with children referred or screened because of emotional and adjustment problems in school.

The results of the analyses proposed in this project should help to clarify those data contributed from the work of the psychiatrist, psychologist and social worker which characterize a child who has school difficulties as compared to the one who is relatively free from problems. In addition, it is important to determine whether such characteristics, once identified, can be defined on a continuum from good to poor adjustment, or whether they interact to produce an anxious but productive child in one case, or a classroom terror in another.

A. General research objectives.

Two major hypotheses will be tested in this project. They are;

1. The data collected by each clinical profession contribute a unique source of variation in the prediction of school adjustment.
2. Quantitative and qualitative data collected from clinical procedures are predictive of school adjustment.

In testing the above hypotheses and fulfilling the project objectives, the following criteria of school adjustment will be used:

1. Judgment of individual clinical group of the child's school adjustment
2. Judgment of classroom teacher that the pupil's behavior deviates considerably from his peers on the dimensions of behavior which reflect school adjustment such as inappropriate behavior, difficulties in learning, problems in interpersonal relationships etc.
3. Success in school as measured by grades assigned to achievement in subject and skill areas, citizenship marks, and other school achievement test scores.

The selection of specific qualitative and quantitative data which will be used in the analyses of this project will be based on the degree to which such data can be shown to predict any of the above or either of the two following criteria of school adjustment status:

1. Composite judgment (an additive procedure using a sum of all independently collected ratings) of each clinical group individually and collectively
2. Collaborative judgment of all clinical groups (a weighing procedure in which the clinician uses the data from other disciplines and compares them against his own findings.)

B. Research related to these objectives.

A previous study (Lambert, 1962) was designed to establish criterion groups of pupils with good to poor school adjustment in the primary and elementary grades, specifically in the 2nd and 5th grades. The goals of this project were to validate a screening procedure which had shown promise for effectively screening a population of pupils vulnerable to or handicapped by emotional difficulties. While this project was concerned with the procedures for establishing the criterion groups of pupils, its major effect was not in the comprehensive evaluation of the procedures which were established. The clinical data which were collected were used primarily to denote by composite rating the degree to which the clinicians agreed that a given pupil would have learning or behavior problems in school. Once a composite criterion score was established, the screening process was studied by item analysis, multiple correlations and multiple cut-off procedures.

An underlying assumption in the above project was that it was possible to locate children from a general school population with good and poor school adjustment on the basis of clinical judgment. In the Kent Pediatric Study, A Study in the Epidemiology of Health (n.d.), the research team demonstrated that it is possible to locate healthy children in a population of 10 and 11 year olds by the use of home interview information, physical and psychological examination. In addition, these workers sought to identify factors in the home setting and personal history of the children which were found in the samples of healthy children and absent in the population of unhealthy children. Other epidemiological studies of general health, A Thousand Families in Newcastle on Tyne (Spence, 1954) and the sequel, Growing Up in Newcastle on Tyne (Miller et al, 1960) were concerned with home factors which were found in families with poor health and with the incidence of certain mothering factors present in case histories of children with mental and physical health. These studies, while originating outside of the United States, nevertheless are valuable in demonstrating that it is possible to identify a specific population from data collected in home interviews and from the history of child as well as from observations of the child in the home setting. The above research studies are most applicable to the work of the social worker in conducting home interviews.

The field of social work has begun to give thought to the problem of prediction and to do some research regarding typologies found from the social case work interview, (Selby,1958) perceptual analysis of impressions (Franshal,1958) and certain types of predictive studies (Grill,1959). This work is of interest, but mainly at an exploratory stage.

The work of Henry and Farley (1959) in a validity study of the Thematic Apperception Test used blind interpretations by various psychologists of TAT protocols along with other psychological test data including clinical impressions and the Rorschach. Their results showed that perceptions are sharpened by a variety of personality data, but that there is a point of diminishing returns. Clinicians were found to have their "specialities" but more consistent use of the projective test was possible when the decisions to be made were definitive and detailed.

Stone's findings (1955) from observations of mothers and children in a well baby clinic demonstrate well the problem in using a specific clinical sign as indicative of emotional difficulty. While one psychiatrist focused on a specific piece of observed behavior another psychiatrist noticed other aspects. Even though the psychiatrists disagreed on the pertinent pieces of observational data which caused them to reach the conclusion that a specific child had emotional problems, they were in general agreement about the fact that the behavior of certain children indicated emotional problems while the behavior of other children appeared normal. This work supports the fact that factual, observational and inferential data are all useful in coming to a conclusion about the mental health status of children, and that some procedure for relating these elements of clinical prediction can be established which will improve observations and inferences from interview data.

The studies quoted above indicate that specific interview, test, or inferential data can be found to be related to indices of mental health, health or adjustment and support the intent of this project that it is feasible to determine the underlying sources of variation in the collection of clinical data with the use of appropriate research procedures. Since criteria for school adjustment have been collected and can be included in the research analysis such data as those studied in this project can be studied in terms of their relationship to these adjustment criteria.

Specific research which is related to the analysis of the contribution of each clinical discipline to the prediction of school adjustment will be discussed subsequently in connection with the work of the social worker, psychologist and psychiatrist.

PROCEDURE

A. Selecting the schools for the study

In this project schools in the Greater Metropolitan Area of Los Angeles were the target for the research study where clinical personnel are relatively plentiful. The time any clinician has available for such a project can be considered limited; therefore extensive travel to schools far beyond the locale of his office would be impossible. School districts were first reviewed and ranked on the basis of their previously indicated interest in the object of the research program and then compared with the potential source of clinical personnel within a half hour's driving time from office to school.

School superintendents were then contacted by letter with a brief statement of the project outline, the expectancies for teacher and staff involvement, the advantage accruing to the school and district for participation, and the cost to the district beyond the time of related school personnel. Those districts which replied to the letter were then contacted in person by the project director.

The school superintendent or his delegate is in a good position to compare a given school within his district with the project objectives and then to determine which teachers, principals and staff members are likely candidates for the project. During the conference with the superintendent, the schools were selected for the study subject to the approval of the principal. Appointments were then made with the principal of each school nominated by the superintendent in order to discuss the goals of the project and the role of the principal and teacher in the collection of the data. No principal who was contacted refused to participate in the project.

Seven schools were selected within the Los Angeles City School District, two in the Claremont School District, and two schools within the La Vista School District in Hayward. The latter schools, lying south of Oakland were selected because the superintendent had made a personal inquiry about the possibility of being involved in the project and clinical personnel were available who could schedule time for the evaluations. The eleven schools which participated in the project were selected by subjective rather than random sample procedures; however, every effort was made to pick schools not characterized by specific socio-economic or environmental factors which would have biased the results beyond usability. In order to deal with community or school district variables which could be later found to be related to the research findings, all available information on socio-economic, intellectual and health factors were recorded. The classrooms and teachers are considered to be typical of those found in California in suburban or urban communities. The schools were distinguished by the fact that the principals were specially interested in the problems of pupils who were vulnerable to school difficulty, but this factor is considered to be an advantage to the conduct of the project rather than a biasing factor.

B. Selecting the sample of pupils for the project

No ready-made list of pupils with or without school difficulties is available in schools. This fact makes selecting a sample of pupils from a continuum of school adjustment problems extremely difficult. Even though a list of referrals to the school guidance office is available, it has limited use. This is principally because many selective factors cause a teacher to refer a pupil and these factors vary from teacher to teacher. Asking teachers to nominate those pupils with and without distinct adjustment difficulties in school is a somewhat better method of obtaining a sample; nevertheless in this regard also, teachers vary in the degree to which they take note of certain pupil behaviors so that little consistency can be expected from teacher to teacher.

Scores from personality tests also have limited use as criterion measures for the purposes of this project since they most typically provide scores on scales describing behavior dynamics or areas of personality motivation, but are of limited value in providing a meaningful over-all score of pupil adjustment. Smith (1958) studied the validity of six group personality tests for children. She concluded that none of the tests discriminated well enough to be used singly. However, she noted that several of the tests indicated group differences large enough to allow for a limited degree of applicability when combined with other measures. In Ullman's study of teacher, peer and self ratings (1957) he showed that the personality inventory had the lowest predictive value when compared to teacher and peer ratings, but that it did add a significant dimension to the total appraisal process. Jackson's correlations of teacher observation, group personality tests and sociometric ratios (1961) indicate that each of these types of scores is measuring different aspects of pupil behavior.

The problem for this research project in selecting the pupil sample in each school was 1) to find some means of tapping the day-to-day observation of teachers so that a teacher rating of school adjustment could be made of each member of the class, and still not contaminate the data requested of the pupil's current teachers which were to be evaluated as school adjustment criteria; and then 2) to take a random sample from this general population which would provide the cases to be evaluated independently by the clinical teams. A school population at the 2nd (7 and 8 year olds) and at the 5th (10 and 11 year olds) grades were chosen as the age levels to be studied.

The teachers who had the pupils when they were in the 1st and 4th grades participated in the initial phase of the project. Their job was to attent sessions after school where they were trained to observe and rate children's behavior on a continuum from good to poor school adjustment. By involving these teachers instead of the 2nd and 5th grade teachers who would be participating in the project in the next school year, the contamination of previous training sessions on the Behavior Rating of Pupils (Bower and Lambert, 1961) which was the teacher rating used in this project could be avoided. The teachers who would administer the teacher peer and self ratings were not involved in the selection of the criterion group and thereby could be considered typical of those teachers who would use these rating procedures in any school situation.

One weak point in this procedure is that the school adjustment of pupils is not a static affair. Some pupils identified as having difficulties at the end of one school year might not have as serious problems in the next grade. Nevertheless, since the purpose of the original teacher rating was to get a score from which a sample could be drawn for the clinical teams to evaluate, such changes in pupil status would be independent of the judgments of the clinician or teacher which were made during the next school year. A pupil with temporary severe problems given a high rating by his teacher of the Spring of one year would not necessarily receive a high rating by the clinical team in the Winter and Spring of the following year. Thus, this factor of stability of adjustment status is not considered to be a problem needing further consideration at this point.

1. Training teachers to make ratings and nominations of school adjustment status

The teacher training sessions held in each school provided a common frame of reference for the initial teacher rating. At these sessions the goals of the project were reviewed, the problems of children with poor school adjustment were described and specific types of children were discussed as examples of those with potential school adjustment problems. Teachers were free to ask any pertinent questions they wished and spent some time discussing general behavior problems of pupils whom they thought might fit the classification. The procedure for rating the class members on a scale of school adjustment was then explained and materials summarizing the training sessions and the rating form were left with the teachers at the end of the meeting.

2. Obtaining initial teacher ratings and principal, teacher and nurse nominations of pupils with adjustment problems

The model for teacher ratings which was developed by the author in previous research (Lambert, 1961) and used in the Behavior Rating of Pupils was applied to the solution of this rating problem. This model is based on the assumption that school behaviors can be rated on a continuum and that the behavior of a specific problem pupil is not in a discrete class of events. The teachers were asked to sort out their entire class on a seven point scale of school adjustment using the definition and description provided in the training session material. A ranking of the entire class was then provided with the pupils grouped in seven categories, roughly in a normal distribution.

In addition to this rating, each teacher was asked to review the class roster and to nominate any pupils with donsistently poor adjustment. The school nurse and principal were also asked to review the rosters and make similar nominations independent of one another. Those who were nominated by the teacher, school nurse or principal were classed under one or more of the five following behavior descriptions of pupils with school adjustment problems.

a. Inability to learn which cannot be explained adequately by intellectual, neurophysiological or general health factors.
b. An inability to build or maintain satisfactory interpersonal relationships with peers and adults.
c. Inappropriate or immature types of behavior or feelings under normal circumstances.
d. A general pervasive mood of unhappiness or depression.
e. A tendency to develop physical symptoms, such as speech problems, pains or fears associated with personal or school problems.

At the end of the training sessions, the following data were available: 1) rating of every pupil on a scale from one to seven (good to poor adjustment), and 2) nominations from the teacher, principal or school nurse of specific pupils in the same classrooms with outstanding problem behavior. These materials were used next to stratify the population before selecting the sample of pupils who would be scheduled for individual evaluations.

3. Dividing school population into two groups - above and below average school adjustment

The grids on which the teachers had made their ratings provided the names of all of the pupils in the class ordered into an approximate normal distribution. Deviations from normalcy came about because once a teacher selected a single pupil for a particular place on the grid, he was to place all other pupils with similar adjustment status in the same column. Peculiarities in class structure would then show up in the skewing of the teacher's ratings to either side of the rating grid. Extreme examples of such skewing were not found. Most teachers found it quite possible to order their class in the model provided in the rating form since the classes in this project were fairly heterogeneous in regard to school behavior.

Each class was then divided into two groups. One group contained the names of those pupils rated as being in the third of the class with the poorest adjustment. The other group of pupils contained the remainder of the pupils on the class roster. Most pupils in the poorest adjustment group had ratings of 5, 6 or 7, while ratings of 1 to 4 were in the group which was rated as better adjusted. Deviations from these rating distributions occurred only when a pupil was nominated by a teacher, principal or nurse and received a teacher rating of school adjustment lower than five. These pupils were placed in the group of more poorly adjusted students when they received a nomination of specific school adjustment problems by the teacher, principal or nurse even though their teacher rating was four or lower.

4. Randomizing, stratifying, sampling and randomizing the population

Two lists for each grade were made of the names of pupils in the classes divided into these adjustment categories. Two lists for the 2nd and two lists for the 5th grade were available for each of the 11 schools. The next step was to number the pupils as their names appeared on each of the lists, and then with a table of random numbers to randomize both lists of names for each grade in each school. Following this randomizing, the number of boys and girls were tallied in the group designated as being composed of poorly adjusted pupils. From the randomized list of the better adjusted pupils the number of boys and girls equal to the number of boys and girls in the poorer adjusted population was selected according to their random order. Two lists were finally available, each with the same number of pupils and balanced for equal numbers of boys and girls. All pupils, who remained were eliminated at this point. The final step in the preparation of this list was to place the names of both groups, the ones judged to be above and below average in school adjustment, on a single list in random order. This final ordering was accomplished according to coin tosses.

5. Establishing the project list

The project list, therefore, was composed of a random list of names of pupils sampled from the total population in terms of teachers' ratings and nominations of school adjustment with equal numbers of better and poorer adjusted pupils and the same number of boys and girls in each category. In such a procedure the most poorly adjusted pupil may not turn up in the randomizing process close enough to the top of the list so he will be selected for clinical evaluation; however, such a disadvantage is off-set since the sample comes from a continuous distribution and is composed of students typical of those in all parts of the school population at that particular grade level, but stratified to contain equal numbers of boys and girls on each side of the distribution.

Arbitrarily, 20 percent of the pupils in any grade was the original limit on the number of pupils who would be evaluated by the clinical teams. This means that on the average five or six pupils from any teacher's class would be in the study sample. In order to anticipate the attrition resulting from a parent declining the opportunity to participate in the project, randomized project list contained more than 20 percent of the pupil population. The number of names on the project list was determined by the school principal who anticipated the degree of cooperation from parents.

C. Selecting the clinical teams

Obtaining clinical personnel for a research study such as this requires careful consideration of the personal and professional qualities which will insure optimum results. This job is somewhat simplified by the fact that clinicians are likely to select themselves. Members of the clinical professions who are interested in the task involved in a research project such as this will be those who are willing to undergo professional self scrutiny. They are willing to risk the security of their private offices where clients come to them for help, and enter the province of the school where they must go and offer services to clients. Each clinician must be willing to subject his regular working hypotheses and assumptions to evaluation and he must acknowledge the fact in advance that his contribution or participation may be rejected by the parents, the child or the school.

In spite of the obstacles, it was possible to obtain the services of well-trained and experienced psychiatrists, social workers and psychologists who were able to relate extremely well in the school setting. The psychiatrists had completed residency in the profession and were attached to clinics or worked in their own private practices where children were frequently seen. The psychologists had the Ph. D. in clinical psychology and also had considerable experience with a childhood population. The social workers' training included the M. S. W. degree or its equivalent and a number of years in child guidance clinics interviewing parents or children. In some cases the social worker's background included work in community organizations. Altogether six psychiatrists, six social workers and five clinical psychologists were employed for the project. They were divided into six clinical teams (one psychologist worked in two settings). Each team was assigned to a particular school or schools and saw all the cases on the project list from the schools to which he was assigned.

D. Developing a standard interview and testing procedures for collecting clinical information on the project sample

The focus of the psychiatrist in gathering data on the project sample was first of all to remain within the traditional clinical roles assigned to the task of making a psychiatric evaluation from evidence gathered from an interview with the child. The psychologist's role was to make ratings and judgments from test scores and behavior during testing. The social worker's job was to gather case data and make inferences about the familial situation and the child's progress from an interview with the mother at home. The project director recognized that such limitations on functioning (no collaboration prior to or during the collection of clinical data) placed some limitations on the workers since they had to rely entirely on clinical materials which could be gathered in these restrictive settings. The disadvantage of the setting was offset, however, by the fact that the data gathered would be uncontaminated by that collected by others. Some additional comments about how the psychiatrist, psychologist and social worker view their professional roles in clinical appraisal will serve to clarify the activities of these workers in gathering the data for this project.

The psychiatrist utilizes a very small fraction of a transaction between two people, himself and the child. The child's responses are evaluated in comparison to the responses of other children in similar situations. These responses are expressed in behavior, sometimes motor, sometimes verbal and sometimes indirectly verbal as in the nature of a dream verbally communicated. The psychiatrist must make certain conclusions about the relationship between the stimuli he perceives and the responses of the child. Contrary to the psychological testing interview, replication of the psychiatric interview situation cannot be achieved because the same subject will respond differently on another occasion or with another psychiatrist. Nevertheless if these interview procedures were formalized and applied often to large groups of similar subjects, enough data could be derived to make possible some experimental or statistical manipulations which could bring meaning to the transaction between the psychiatrist and the child, or to make judgments about the probability of certain behavior occurring during this particular type of situation. For the purpose of observing children under this specified condition even though the child may behave differently in the psychiatric interview setting than under other environmental conditions, the psychiatric interview offers an experimental situation which has the potential of predictive data from children's behavior.

The goal of traditional psychiatric diagnosis (The Diagnostic Process in Child Psychiatry, 1957) is to understand the history of the presenting complaint and its etiology, and to develop a plan of treatment designed to eliminate, control or ameliorate the negative forces, while making the fullest possible use of the positive forces in the child and his situation. Typical psychiatric evaluation includes the collection, integration and evaluation of pertinent data, the identification of etiological factors, specific or multiple, and the formulation of a working diagnosis, prognosis and treatment plan. The first approach to the child psychiatrist is usually made by the parents or by a referring source, such as the school, on behalf of the parents. Diagnosis in child psychiatry is directed at an understanding of past and present interactions and at the strengths and weaknesses of the major persons in the child's constellation - the child, the parents or parent substitutes, siblings, other key relatives, and the personnel of schools and other social institutions who may influence his maturing personality. Clearly delineated and universally accepted diagnostic classifications for children have not been established. The child psychiatrist sees an immature individual who is in a fluid state of incomplete personality development, characterized by normally rapid physical and psychological changes.

This somewhat lengthy description of the child psychiatrist's usual method of functioning is necessary since in this project, his role was more markedly different from his usual role than the other workers. In this study the psychiatrist had the child as his only source of information. No case history data from the social worker were made available to him, no information from personnel in the schools, and no psychological test data. His job was to spend time with the child determining beforehand in conjunction with his colleagues what types of stimulus questions and procedures would be used and what observations would be made on a standard interview schedule. The limitations of the setting also had to be observed. Since the children who were to be evaluated represented a broad continuum of behavior and permission had been given by the parents for an evaluation of the child's attitudes toward school and education, the psychiatrist could not exceed the limitations of this sanction.

The clinical psychologist's role in this project, unlike the psychiatrist was more typical of his usual manner of functioning. The psychologist uses standard tools of measurement for which he has established norms. In a battery of tests selected for administration, he will include tests of cognition and perception and attempt to get some measure of the affective behavior of the child from a variety of projective devices. For each of these tests some standard methods of transferring a response into an objective scoring scheme is available and there are, for the most part, standardizations of these scoring categories so some inferences about differences from population parameters can be made about a particular child's performance or about the performance of a group of children. Utilizing standard testing conditions the psychologist observes the child's response to the situation and records significant behavior. He also notes how the child responds to test materials, and takes special care to record an affective response which would later provide a clue to an area of particular difficulty for the child, and finally prepares a report of his observations, test scores, and predictions about how a child differs from the norm.

Even though the psychologist has the benefit of standard scales with which to interpret a child's test scores, he has some of the same problems as the psychiatrist since information about a referring problem or case data from the family-child relationships are extremely useful in making sense out of particular test behavior. In addition, in situations where the psychologist is called upon to make predictions about the degree of severity of a school adjustment problem from the data he collects, few validity data are available which make possible a statement about the importance of a particular finding in predicting a behavior syndrome.

Social workers are interested in helping clients find relief from environmental and/or emotional pressures. Selby (1958) comments on the fact that the field of social work needs to describe more fully how the social worker helps clients to make use of their own adaptive capacities in resolution of their problems and utilize their own strengths and resources for problem solving.

Social case work training provides a good background for understanding child development and making a clinical appraisal of the individual. In both academic and field work experience, however, the emphasis in training is frequently greater in the understanding of deviant behavior, just as in the case of the psychiatrist and psychologists, than in the understanding of characteristic patterns of child development at different age levels. Even though Grill(1959) makes note of the fact that knowledge of child development at different age levels is very important for the school social worker, the focus of social work is on description of behavior, and the child or family becomes the norm.

Some work toward developing typologies for caseworkers has been accomplished by Selby. She reviews the needs for typologies, the resistances to developing them, but sums up the problem by challenging the profession of social work to come to some agreement about what they need to know in order to insure limits, relevance and direction for their helping efforts.

The focus of the social worker, therefore, is on evaluating the state of mental health of the child in his environment. His basic equipment is an awareness of the cultural and social components in the organization and control of human behavior. He becomes sensitized to the social milieu by systematic training and experiences in different cultural environments which make him aware of motivations from a cultural point of view. This aspect of his training is analogous to the sensitizing of the psychoanalyst to unconscious motivations through a training analysis. Hollingshead (1958) states that the evaluation of an individual situation is based on at least three basic operating assumptions:

> Social behavior is learned by individuals through their interaction or association with other members of their society.
>
> The content of what individuals learn is provided by their society's culture.
>
> What individuals learn is determined by participation in society's culture.

These workers who comprise the clinical team represent a combination of years of training and experience in observing, describing, classifying and prognosticating human behavior. Each has his own radar by which to direct the course of his observations. Sarbin (1960) provides a philosophical point of view in understanding the clinical process. He states that "no single process or event can be isolated as the important locus for the study of inference as an aspect of the clinical process. We can recognize five outstanding features:

> The observer is engaged in the transformation of knowledge. He brings into the enterprise various kinds of dispositions, skills, beliefs, attitudes, assumptions and so forth, which limit the nature, direction and scope of the inferential product.
>
> The direction, purpose, aim, or objective of the cognitive work of the clinician must be taken into consideration.
>
> The input of raw material out of which inferences are made must be defined. They are aspects and properties of the objects of judgment.
>
> The modus operandi of the inferring person accounts for the implicit and explicit manipulation and transmutation of raw sensory events into knowledge about people.
>
> The product of the inferential enterprise, the outcome of the process, is a

diagnostic statement, a classification, a thumbnail description, a prediction and so forth."

It was thus important to recognize and account for the particular skills and background of each of the professions constituting the clinical teams who were selected to evaluate a criterion group of 2nd and 5th grade pupils. The interview schedules which they used in gathering data about children had to present realistically a task which they could accomplish with their particular modus operandi. This project required that the input of data from which inferences and ratings were later made was to be recorded; therefore scrutiny or previously conducted predictive research had to be made before the schedules could be developed. In addition, standard procedures had to be followed so that reasonable assurance could be had that procedure used in this project was similar for all pupils and would have applicability for other workers. The inferential product of the individual evaluations was a number of qualitative ratings of pupils or families based as much as possible on the objective data which were recorded on the interview schedules.

1. The psychiatric interview schedule

Ernest Kris (1950) was one of the first psychoanalysts to emphasize the importance of predicting from observational data that pathology exists in a given child. He was primarily concerned with recognizing symptomatology before it became manifest, and to spot danger to the child before it appears. Anna Freud (1958) in reviewing Kris's work cites the difficulty in such clinical foresight. She points out that a) there is no guarantee that the rate of the maturational process on the positive side of ego development and drive development will be constant; b) there is no way to approach quantitative factors in drive development, nor to foresee it; and c) the environmental factors in a child's life will always remain unpredictable since they are not governed by any known laws. Nevertheless she feels that there is a place for prediction in child psychiatry in a) observing anxiety and symptoms even though it is difficult to draw the line between prediction of pathology based on authentic danger signals, and a diffuse and indiscriminate overanxiousness; b) gathering information about the early mother-child relationship; c) noting the presence of powerful interests, curiosity, fixation, sublimations and so forth; d) making some assessment of traumatic events. However, Anna Freud makes a special point of the fact that it is difficult to know which aspect or element of a given experience will be selected by the child for reaction and emotional involvement.

The psychiatrists who participated in this project were well aware of such admonitions against making predictions about behavior from a single observation. Nevertheless, they were willing to develop procedures which they felt could be used to assess a number of children in a school setting. A beginning was made by making large lists of behaviors on a continuum from what could be inferred as indicative of poor adjustment to which could be inferred as indicative of good adjustment. Next a list of symptoms was developed which could be expected in a sample of 7 and 10 year olds with possible school difficulties. Observations of the child, such as his posture, size, physical appearance, health, speech, indicated interest in school and others were reviewed by checking forms used in clinics for making such child observations. Finally a number of useful observations which could be recorded easily in a few minutes after the child was interviewed were selected and placed on an interview schedule.

In addition to observational data, the psychiatrists had to decide on the qualitative or inferential judgments which they would make about the child. These had to be based on material which could be gathered in the time spent with the child in school, as well as on aspects of personality or genetic variables which could be inferred from the child's behavior during the interview period. The qualitative judgments had to be kept to a minimum since each child had to be rated with respect to every other one the psychiatrist saw. A point of diminishing perception of differences between children is soon reached when too many qualitative judgments are required. After much negotiating and professional soul-searching, the psychiatrists suggested the following qualitative judgments as the summary inferential ratings which they would make from their experience with the child:

Is this child a child who has serious learning difficulties?

Is this child one with serious behavior problems?

Does this child need psychiatric treatment?

To what extent can this child's behavior be modified?

Is this child comfortable with himself?

Is this child comfortable with others?

Does this child have appropriate contact with and relationship to reality?

Finally the psychiatrists decided that a brief summary of their impressions of the child would allow for the inclusion of any significant observations which did not find a place on the interview schedule or in the qualitative judgments.

2. The psychologists' testing schedule

Measures of intelligence, perception and affective behavior were selected by the psychologists as the minimum number of tests in a battery which would yield the maximum amount of information in the suggested one-hour limit of testing time for each child. Psychologists have a great number of measurement tools from which to select; the problem is selecting those which will provide the best opportunity for observing the responses of the child as well as selecting those with the greatest amount of previous research demonstrating the validity of the test for predicting some aspect of vulnerability or adjustment status.

For a measure of intellectual status and its relationship to personality style the Wechsler Intelligence Scale for Children (WISC) was selected since it provides a good sample of mental tasks. The entire WISC battery of 12 sub-tests was considered too lengthy if other tests were to be included in the one-hour testing time. A short form of the WISC was used which included those sub-tests which a) gave most personally meaningful material, b) correlated well with the Full Scale IQ, c) required a minimum amount of time to administer, and d) were convenient and easy to use. In addition, no less than two sub-tests on each scale, Verbal and Performance, were to be included. The rank order of correlations with the Full Scale IQ as listed in the WISC Manual is as follows:

	Age 7½		
Vocabulary	.71	*Similarities	.64
*Information	.69	Object Assembly	.64
Picture Arrangement	.68	*Block Design	.63
Arithmetic	.66	*Picture Completion	.56
Comprehension	.64	Coding	.50

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*Sub-tests marked (*) are those included in the Short Form of the WISC administered by the project sample.

Age 10½

Vocabulary	.87	*Block Design	.72
*Information	.82	Picture Arrangement	.70
*Comprehension	.76	*Picture Completion	.61
Arithmetic	.76	Object Assembly	.58
*Similarities	.72	Coding	.54

Littell (1960) reviewed all of the research on the WISC for a period of ten years and concluded that there were few, if any, adequate investigations of the predictive validity of the WISC. He commented on the value of the WISC as an instrument for making hypotheses about personality styles from test responses by noting that nowhere in the literature covered was there more than the barest beginning of the investigation of the validity of various interpretive hypotheses. He made further note of the fact that since most inferences are based on an intuitive appraisal of the content of the sub-test and the informal observations of test administrators, there is a need to study variables in the relationship between examiner and examinee, to evaluate the circumstances of the examination and the effect of repeated administrations.

Glasser and Zimmerman (1961) have attempted to quantify some of the observational data which can be obtained from the WISC and they list a number of behaviors which are frequently noted in response to test items as well as some suggestions for their interpretation.

The *Bender Visual Motor Gestalt Test* (1938), a test of perception, requires the child to reproduce designs appearing on nine separate cards. These nine designs were selected from Werthheimer's original 21 designed to investigate gestalt theory. The administration time is minimal. It has been used to assess the development of perception in children, to note the effects of brain injury, and in gathering data to be used in studying neuroses and psychoses. The most useful predictive research on the Bender has been done by Byrd (1956), Clawson (1959) and Koppitz (1958) (1960) (1961). These workers have shown that rotations of designs, distortions, problems with angulation and closure and arrangement of materials on the page are patterns of response which have potential for significantly predicting those pupils who will have difficulty in school and reading achievement. The Bender was used by 80 percent of clinicians surveyed by Schulberg (1961). These clinicians indicated that it had "some or great" diagnostic value.

One of the most common projective tests used in clinical diagnosis is the Rorschach. Ames (1952) (1959), Beck (1945) (1952) (1960), Ford (1946), Halpern (1953), Klopfer (1954) (1959), Ledwith (1959) (1960), and Rabin (1960) provide materials on the use of the Rorschach with children, scoring procedures and normative data. In summary, the authors listed previously contend that Rorschach appears to have considerable value as an instrument for drawing inferences about personality, reactions to environmental settings, affect, and content of cognitive experiences in a highly emotional setting. While the above work is concerned primarily with scoring procedures and the use of the Rorschach report in making a diagnostic summary about children, little other research has been done with the predictive validity of certain Rorschach signs. The normative data provided by Ledwith and Ford offer at least one departure toward prediction from Rorschach responses, but we can determine from their work only the probability of a particular finding. Siegal (1954) found a relationship between certain Rorschach signs and positive or negative response to psychotherapy, and Robbertse (1955) and Meyer (1953), as mentioned previously, found certain responses more frequently in children with delinquent or reading problems respectively.

The battery of tests finally selected by the psychologists was the short form of the WISC, the Bender and the Rorschach. In addition the categories for observation

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*Sub-tests marked (*) are those included in the Short Form of the WISC administered by the project sample.

of the child's reaction to the test materials and the child's reaction to the examiner as developed by Glasser and Zimmerman (1961) were included in the testing schedule on which all scores and all observations were recorded.

The psychologist like the psychiatrist and social worker was responsible for making inferences from the "hard" test data to more "soft" statements about the child's adjustment status. They selected the following qualitative judgments as being those inferences which could be made on the basis of their psychological examination and observations:

Does this child have poor intellectual functioning?

Does this child have severe perceptual difficulties?

Does this child have severe personality disturbances?

Does this child have problems relating to his classroom teacher?

Does this child meet learning tasks effectively?

Does this child have creative potential?

Does this child have poor school adjustment?

Does this child have poor school achievement?

What is the over-all rating of the WISC?

What is the over-all rating of the Bender?

What is the over-all rating of the Rorschach?

3. The social worker's home interview schedule

Most of the data about genetic, physical, familial and environmental factors which could be predictive of school adjustment are collected by the social worker in the routine gathering of developmental history information. In this project social workers made a home visit which enabled them to gather a number of important facts about the neighborhood in which the family lived, the condition of the home and other important environmental variables. The difficulty in developing the interview schedule for the social workers came about in reducing the schedule to a sequence of data which could be gathered in one hour's time. In addition, the social workers knew that in the simple reporting of facts about the child's life, little opportunity for observing the affective response of the mother to the child would be available; therefore some technique of eliciting response which would give cues to the family-child or mother-child relationship had to be developed.

The most obvious area for gathering data was the developmental history of the child. Here, pre-natal and birth conditions were important to record. Facts about the birth of the child and his early health, in addition to any specific eating or sleeping problems were needed. Toilet training, childhood illnesses, both chronic and temporary, and hospitalizations could also be noted. The child's relationship to the family, other adults and to sib and peers were additional sources of queries. The method of discipline employed, evidence of consistence, and the parent's perception of the child's progress in school and specific learning needs were listed as other areas of information gathering. Involvement in religious activities, marital status and leisure time activities were also included for information. In addition to these objective facts a list of stimulus questions was developed which was to be used by the social worker to elicit responses with affective content. Some examples of these are as follows:

Are there any early photographs of the child, or a baby book with his early life history?

What is the routine at bedtime?

Do you ever read to the child?

What did you do when your child cried when he was a baby?

How do you feel about sex education in school?

How do you feel about teaching religion in school?

What do you feel that the school should do about troublemakers?

The important area of socio-economic factors was recorded by direct observation and questioning. A review of some of the objective procedures for arriving at an indices of socio-economic status was made. Warner's (1960) procedure for using housing, occupation, source of income and neighborhood was selected since a weighting of ratings on each of these factors was suggested and a distribution of scores related to socio-economic status was available. The criteria for housing, neighborhood and occupation level were used as suggested by Warner, and provided for ready reference for the social worker along with the interview materials.

All of these data were summarized mentally by the social workers when they were asked to make out a summary sheet which recorded the evidence of any genetic, environmental or psychological factors which could be related to a child's problem in school. The "Summary of Social Worker's Interview" was added at the end of the schedule to assist the worker in organizing the multitude of data collected. Finally the social worker was asked to make qualitative judgments about the child's status from inferences from the interview data and the summary. The inferential and qualitative judgments which the social workers felt that they could make from their visit in the child's home are as follows:

This child has a serious physical problem (handicaps, psychosomatic disorders, general health problems)

This child's development has shown deviant psychological patterns (deprivation, rejection, hostility, etc.)

The social environment (housing, neighborhood, cultural values of family, peer relations, etc.) in which the child lives has been conducive of poor development

This is a family which would produce a child with serious learning and behavior problems

This child has serious personality problems

This child has school adjustment problems

This child has school learning problems

E. Gaining parent approval for a child's participation in the project

One cannot expect that the parent of every pupil sampled for the project will be interested in participating in the project. A rejection factor of 10 percent is expected in research which requires door-to-door sampling. One can expect a much larger rejection figure in a research project which requires parent participation to the extent of providing the social worker with a complete developmental history of the child as well as permission for psychiatric interviewing and psychological testing.

A number of possible approaches to the parents were discussed with the school principals. On the basis of these discussions the project director allowed the principal to determine which method would be most appropriate for his particular school. Regardless of the method used, the children were contacted in the order indicated on the randomized project list. If a rejection occurred, the next name on the list was used.

1. The types of parent contact which the principals selected were either one of the following:
   a. Principals send letters home to parents of all 2nd and 5th graders to inform them of the project and to let them know that their child might be picked at random to participate. School secretaries then call parents and schedule social worker home visit.
   b. Principals send letter home to parents of pupils on project list adding enough names from the project list to anticipate a given amount of rejection. Letters contain a tear-off sheet which the parent returns either with his child or by mail indicating that he is willing to participate. The tear-off sheet which is returned to school indicates days and hours when parents will be home. The social worker, then, makes an appointment directly with parents.

In the second method it was necessary to anticipate that the tear-off sheets would not be returned by a number of parents either because they did not want to participate, because they forgot, or because it was too much extra trouble for them at that time. Tear-off slips were returned to school for about half of the pupils for whom they were originally sent home. Principals did not pursue a parent who neglected to respond to the letter. If they did not return the tear-off slips, no further contacts were made. Obviously, the research sample could be seriously biased by this procedure since the sample of pupils for whom the tear-off slips were returned might be significantly different in terms of the teacher rating of school adjustment from which the sampling was made. A careful check was made of the teacher ratings of those who participated against those who did not participate. Only one of these distributions of original teacher ratings for those who accepted against those who rejected project participation was found to be significantly different at the 5 percent level. The frequencies which account for the differences between the accept and reject groups for 2nd grade girls come at the middle of the distribution. This may be a result of sampling and not a result of other selective factors. The proportions of pupils at the ends of the distribution are comparable for this sample. The comparison of the frequency distributions for the total sample (all groups combined) of participants vs. non-participants shows no significant difference in the distributions. These findings are accepted as evidence that the sample which did not reply to the contact by the school principal or the school is not significantly different in terms of initial teacher ratings of adjustment from the sample which did reply.

2. Contact of the parents by the social worker and obtaining permission for the psychiatric interview and psychological testing

The social worker who was assigned to a school visited the homes of each of the pupils whose parents indicated an interest in the project. In a few cases it was not possible to contact some parents, even on second and third trials, even when calls were made directly at the home. In a couple of other cases, children moved between the time parents replied to the contact by the principal and the time that the social worker could schedule an appointment. A few other problems were encountered also; however, it is important to note that of all of the parents who indicated an interest in the project only six parents refused consent for interviewing and testing following the social worker home visit. This is less than 2 percent of all the families contacted. One specific goal to be accomplished by the social worker at the conclusion of the home visit, in addition to the collection of data on the interview schedule, was to obtain written consent from the parents for psychiatric interviewing and psychological testing of the child at school. The forms were provided by the project office. Only after they were signed by the parents was a child seen at the school by a psychiatrist or a psychologist.

F. Procedures used in collecting quantitative, observational, and qualitative (inferential) data on the project pupils

Prior to the initial interview with the parents of the child the clinical teams met in concert and in individual groups according to the particular clinical discipline to discuss the purposes of the project, to review pertinent research related to the predictive aspects of tests and interview behavior, and to develop the standard interview procedures which were to be used in the project. Additional meetings were scheduled regularly during the period in which the interviews were being conducted in order to provide an opportunity for the team members to discuss with other members of the same clinical discipline the problems they encountered and to share any difficulties which they had in using the schedules. It was unfortunate that time was not available for an extensive shake down of each interview and test procedure before the first project pupil was seen. Because of this time restriction it was necessary to rely on the experience of the team members and their ability to judge the appropriateness of each of the interview items as the schedules were developed.

1. Collection of quantitative and observational data on the interview schedules

The interview schedule for social worker, psychologist and psychiatrist comprised a model for the conduct of the interview and contained the facts about the family and child which were to be routinely recorded. Codes for each of these data were decided upon in advance. If codes did not fit the obtained information, the clinician recorded what information he was given and additional coded classifications were later added by the project office.

For the social worker, facts about birth, early life history, relationship with peers and adults and data about the social environment comprise the type of information collected on the schedule. These are facts or observations which can be considered to have relatively high reliability since another worker using the same schedule presumably would get similar answers. The embellishments provided by the mother in answer to the questions were used by the social worker later when she made summary and inferential judgments to amplify the parent-child relationship patterns, to get some clues as to the place for the child in the family, and to obtain some idea as to his relationship to other members of the household.

The psychologists, in giving the prescribed psychological examination, recorded scores on WISC sub-tests, Bender design deviations following an objective scoring procedure (Lambert, 1963) and the scores on the Rorschach performance according to the Klopfer (1954) procedure. In addition to these objective facts, they made note of behavior characteristics of the child during the testing situation, noting only whether the behavior was absent (or not manifest during the test interview), present or present to a marked degree. These data were utilized later when the psychologists made a judgment of the child's probable behavior in the regular classroom situation or his likely attitude to school learning materials. The comments made by the child during the interview were recorded on the protocols, and used in verifying the importance of particular test findings when the qualitative or inferential ratings were made at the conclusion of all psychological examinations.

The psychiatrists, with a much less structured interview procedure than either social worker or psychologist, were asked to make routine observations of the child's appearance, physical condition, general behavior, symptoms, reaction to the interview situation and so forth. These were recorded immediately after the psychiatrists saw the child on the interview schedule. A standard approach was used by all psychiatrists in which they began with, "We are doing a study to find out about children your age - how they feel, what they think about, how they like school," and so forth. After an explanation about what psychiatrists do and what kind of doctors they are, the interview followed the pattern set by the interaction of the child with the setting. Certain key questions were routinely asked, for example "What three wishes do you have?", and "What do you want to be?" In addition to himself, the psychiatrist used a play kit which was a large inexpensive suitcase containing puppets, pop guns, play doctor kit, balloons, crayons, paper, gum, candy and a few other articles designed to make the child at ease during the interview and to give him something to do if he felt uncomfortable in spending the time talking.

As the child responded to the situation presented in this interview setting, the psychiatrist mentally recorded behavior and attitudes which were pertinent to the child's development and made notes on the interview schedule after the termination of the period. All of these observations and responses were used at the conclusion of the interviewing in order to make the inferential or qualitative judgments.

2. Procedures for making qualitative or inferential judgments

The instructions to clinicians for making qualitative judgments were the same for all clinical groups. The task was to use a grid with five columns and as many rows as needed (10 rows were on the original form) to distribute the pupils for each qualitative judgment on a scale from one to five. A judgment of "1" was made when the clinician believed a particular child to be the most free from the trait listed. A judgment of "5" was made when the clinician believed the child to be least free from that trait and one with serious difficulties in the area being judged. Contrary to the instructions to teachers for making the original teacher rating, no pre-established form of the distribution ratings was given. The task was to select from a sample of a minimum of 20 pupils of the same grade level, at least one who was to be placed in column 1 and at least one to be placed in column 5. Once these two anchor pupils were located from the sample on a particular qualitative judgment, the process was to list any others who were similar in that particular trait to the anchor in the same columns and then to find those who were more or less similar and place them in squares in columns 2, 3, or 4. The same procedure was repeated for each qualitative judgment. A new grid with 50 squares (five columns and 10 rows) was used and new anchor cases were found. It was possible that the same pupil was an anchor pupil for more than one qualitative judgment, but this was not usually the case. Only when a clinician saw fewer than 20 pupils at one grade level was the distribution sometimes narrower than the required five ratings.

This procedure for making qualitative judgments resulted in each pupil receiving 25 ratings, 7 from the social worker, 11 from the psychologist and 7 from the psychiatrists, on a scale of from 1 to 5. Each of these judgments were made independent of one another. Following the qualitative rating procedure, the clinician was required to review the pupils who were placed as anchors in the 1, 3, and 5 columns, and list a number of descriptive adjectives from his case material which could then be formulated into the criteria for making the rating. While the procedures of this project made it impossible for two clinicians to interview a common sample of parents or pupils, the distributions of their ratings, and their average ratings for each judgment were compared in order to detect any important biases which might have crept into their judgments. Where any notable differences did occur, differences in the location of the school or possible pupilation variables seemed better able to account for the discrepancy than actual bias in the clinical judgment. This is recognized as a weak substitute for a measure of the reliability of clinical judgment; nevertheless, the notion that clinical bias was kept to a minimum seems justified.

G. Selecting and gathering the school-collected data to be included in the analyses

In addition to the data to be collected by the clinical teams some school information is valuable in shading in the picture of the child. The data which were to be collected from the school had to be those which were readily available from school records. In addition teacher, peer and self ratings would be administered by the classroom teacher during the Spring of the school year at the time that the clinical teams were conducting their evaluations.

A variety of information is recorded on the pupil's cumulative record folder at his school. Courses of study, books read, father's occupation, teacher's comments about school progress and dates of parent conferences are typical of what is found. School grades, ability and achievement test scores, number of unsatisfactory marks on the report card, number of excused and unexcused absences, and number of times tardy to school are also common to many pupils' school records. Whatever data to be selected had to meet the requirement of being typical to all of the records which were available in each school. Therefore, the lowest common denominator of data was used. In each case, the information which was recorded for this project had to have been shown to have an actual or potential relationship to school adjustment status.

In a study of grades assigned to high school boys Hansen (1950) demonstrated that promptness, classroom decorum and a compliant attitude were some of the critical variables predicting grades. Another study (Lambert 1964) showed that there was a significant difference between grades assigned to high school pupils who were judged to be poorly adjusted by their teachers and grades assigned to pupils judged to have no or few adjustment problems.

School achievement has been shown frequently to be an important dependent variable in studies of school adjustment. Bower (1958) provides data to compare the achievement of pupils diagnosed as emotionally disturbed with those judged to have no school problems at the elementary grades. He further amplifies these differences when comparisons were made between children selected at random from the general school population as having school adjustment problems and those having no evidence of school difficulty.

Convergent ability test scores have also been shown to be generally lower for pupils with school adjustment difficulties when they are compared with their peers without problems. Specific research studies which compare cognitive abilities for pupils with adjustment problems compared with peers without problems are difficult to find. This is principally because children with lower intellectual potential traditionally have been thought to belong to the group of "slow learners" or "minimally mentally retarded" and not to a population of pupils with mental health difficulties. The Los Angeles County Mental Health Survey (Welfare Planning Council of Los Angeles County, 1960) showed that the incidence of behavior problems of pupils in classes for the mentally retarded was about three times as high as that for regular classes. Bower (1958 and 1960) provides evidence to show that pupils diagnosed as emotionally disturbed or selected from the general population as ones with school difficulties have, as a group, significantly lower scores on both group administered and individually administered tests of intelligence. Though the specific cause-effect relationship between cognitive abilities and mental health or school adjustment status has not been defined at length, one can infer from the data that are available that intellectual potential is a necessary psychological resource for the resolution of the learning and interpersonal demands of the school environment, as well as for mediating the environment outside of the school situation.

Following Guilford's definition of the structure of intellect (1958) and his delineation of convergent and divergent thinking abilities a good deal of interest has been aroused in attempting to relate scores on divergent thinking tasks to indices of school achievement, teacher's ratings of creativity, and to some behavioral characteristics. Chief among those who studied the elementary school age population is Torrance (1962). He argues that the pupil with high divergent thinking abilities feels alienated from his peers and misunderstood by them. These attitudes cause a derogation in self concept which has been thought to inhibit school adjustment. At least minimal writing and spelling ability is necessary for group administration of divergent production tasks such as those represented in Torrance's Verbal and Non Verbal Creative Thinking Tests (1960); therefore only students from the 5th grade classes participated in this particular testing program. In order to guarantee comparability of results two research assistants who had both been teachers of elementary school age pupils for a number of years administered all of the Creative Thinking Tests following standardized administration instructions. Scoring of these tests was accomplished by revising procedure supplied by Torrance. These procedures were modified to fit the age sample to which the tests were given and are described elsewhere (Lambert, 1964).

Even though the number of unsatisfactory marks a pupil receives on his report card has not been subjected to critical research evaluation, these marks obviously reflect non-intellectual factors in the pupil's school performance. The traits which are typically rated are cooperation, obedience, promptness, thrift, health habits, effort, enthusiasm and so forth. Since the particular items which are rated vary from school to school, no attempt was made to evaluate a particular trait. Instead, the number of unsatisfactory marks listed on the report card was the information which was recorded. The assumption here is that the greater the number of unsatisfactory marks, the poorer the pupil's behavioral adjustment in the school setting.

School retardation is another variable which either reflects school adjustment status or is causally related to it. This can be measured by determining the difference between a pupil's age and the average age for other pupils in the same grade. When the difference is greater than one year, the pupil has been either retained or accelerated in his school program. The number of days absent from school also gives a picture of possible health factors which might reflect adjustment status.

The father's occupation listed on most cumulative record cards is another piece of information which certainly has value in predicting school status. Even though occupation is only one facet of the structure of socio-economic status, it is a simple and easily available method for gaining some indication of the social status of the family. Numerous studies have shown socio-economic status to be related to mental health problems or school adjustment as shown by Andrew and Lockwood (1954), Gough (1946), Kuhlen (1952) and Neugarten (1945).

The teacher, peer and self ratings which were used in the analysis of school-collected information related to school adjustment status have been the subject of extensive developmental and validation study. Bower (1958) demonstrated initially that pupils who had been diagnosed as emotionally disturbed were significantly different from their peers without serious school problems in terms of their teacher's perception of problems, peer ratings of behavior and self report of personal difficulty. These ratings were later used in a large state-wide survey (Bower, 1961) containing 50,000 pupils and the earlier results were verified with one important exception. This exception was the change in relationship of the father's occupational level. In the earlier study, there were no differences in father's occupations for the sample which was diagnosed as emotionally disturbed from the California occupational distribution. In the later study, which sampled an entire school population, occupational status was very significantly different for those children with school problems as compared with those who were not identified. These findings suggest that clinic populations may represent, in general, a proportionate distribution of occupation status (or socio-economic status) but that when surveys of populations are conducted, occupational status is probably an important predictor variable.

Other studies of the ratings scales have been made. Lambert (1961) presents preliminary validity evidence for three batteries of ratings, one for primary grades, one for elementary grades and one for high school students. When the ratings are studied separately, both individual items, and total scores differentiate between populations judged to have school adjustment problems and those considered to be free from such difficulty. In addition, selection procedures which have been suggested for the use of the instruments in a program of early identification of problem prone pupils have been shown to identify a variety of pupil problems as determined by later diagnostic study, and to identify pupils who are judged to have from moderate to serious school and personal difficulties.

In 1961 and 1962 an extensive validity study (of which the data reported in this paper are a part) was conducted to determine the individual and collective validity of the teacher, peer and self ratings (Lambert, 1962). This study showed that independent clinical evaluations and ones made collaboratively gave in general significantly more ratings of school adjustment problems to pupils with high (negative) teacher, peer and self ratings taken independently and collectively. When individual intelligence test score and an index of social status characteristics were added to the multiple prediction battery the multiple Rs ranged from .49 for 2nd grade girls to .89 for 5th grade girls. A multiple cut-off procedure showed comparable validity for the collective use of the ratings. A recent study by Zax et al (1964) verified the use of the peer rating, the Class Play and the self rating, Thinking About Yourself by comparing scores on these instruments with other measures.(Bower and Lambert, 1961) The ratings used in this project are as follows:

	2nd grade	5th grade
self rating	Picture Game	Thinking About Yourself Part II Class Play
peer rating	Class Pictures	Class Play
teacher rating	Behavior Rating of Pupils	Behavior Rating of Pupils

All of the ratings were administered by the classroom teacher, and scored by her unless she wished help from the project officer with the scoring process. Instructions for administration and scoring were provided in the Manual for Teachers and Administrators (Bower and Lambert, 1961) and were followed in each case. In order to insure maximum comparability of data, teacher meetings were scheduled in each school to discuss the procedures and to review the problems which might be encountered in the administration of the ratings. When a teacher found that it would be impossible to administer the tests herself, assistance was provided with this task by graduate student research assistants which worked out of the project office. In one or two cases they assisted the teacher in the rating administration.

All of the data which were to be taken from the cumulative folders were coded on project forms from the folders directly at the school. Every effort was made in the collection of these data from the school setting to insure comparability of ratings and reliability of test administration and scoring. All findings were coded and made available for the analyses of the school data listed above as predictors of school adjustment status.

H. Analyzing the data

In order to determine the underlying variation in the data which are collected for this project a factor analytic procedure will be used. Altogether approximately 150 variables will be collected for each age and sex sample. The data can be combined in a variety of ways, but the research objectives can be met best by keeping the number of variables in each analysis at an optimal level by analyzing the data collected in each separate clinical setting and then by comparing the results of each analysis. Thus the data collected by the social worker will be combined for one factor analysis. The material collected by the psychologist will comprise two additional analyses in order to keep the number of variables in each analysis at an optimal level. The psychological test data will be grouped together for a second analysis and the observations and qualitative judgments will be combined for the third analysis. The psychiatrist's observations and qualitative judgments will make up the fourth factor analysis of clinical data. The school-collected information which is available on all members of the pupil sample from which those youngsters on whom clinical evaluations were made were sampled will make up the final analyses. Since over 300 pupils are in each analysis for the school-collected data, it is possible to tolerate a larger number of variables in the factor analysis of the school-collected data. Each analysis will be made by age and sex so that for every set of data, five analyses will be conducted making 20 factor analyses in all.

The results of the factor analyses should make it possible to determine the principal sources of variables operating in the work of each clinical discipline. If each source of variance is accepted as making a unique contribution to the entire set of data, the contribution of each clinical discipline can be equated to the descriptions of the factor dimensions which are uncovered.

The method selected to factor analyze the above data was the multiple group solution (Harman, 1960, p. 216-230) or what Tryon (1956, 1957) calls Cumulative Community Cluster analysis. This method calls for locating groups of variables which have in common some general property or some underlying psychological theory. Next successive independent axes are passed through each of these groups or clusters of variables. The factor loadings of each variable with the first axis are then found and residuals computed. Next a second axis is passed through another group of variables, the factor loadings are computed and then the residuals. The process is continued to a final dimension for which all residual correlations vanish within a specified criterion. According to Tryon, the factoring process itself yields axes which are close to those factorists would say define "simple structure"; thus rotation of the axes to simple structure following the factoring may not be necessary.

Each of the five sets of data will be analysed by the above factor procedure. Following these analyses the next objective of the project will be evaluated. If each of the factors derived from the analyses of clinician-collected and school-collected data is considered to be a unique source of variance within that set of data some procedure must be used to determine whether such variance is a result of situational or method variance or whether it can be inferred to be a result of real psychological differences between individuals. This problem in interpreting results such as these has been developed at length by Campbell and Fiske (1959). They point out that in research which uses a variety of method and trait variables, the differences which frequently appear among the factors are a result of method, apparatus or instrument factors and not a result of true underlying psychological variables. They propose correlation matrices in validity studies which utilize intercorrelations among tests representing at least two traits each measured by at least two methods. However, we do not have readily available procedures for multiple measures of traits and methods. We do have, however, a variety of types of observation of the pupil sample, and a few of the variables represent independent judgments of the same trait by different observers. It is highly possible, nevertheless, that separate factors extracted in the analyses proposed above will be just such method or situational variables as Campbell and Fiske describe above, and not factors which have real psychological significance for the prediction of school adjustment.

In order to evaluate this question further a procedure will be employed to determine to what extent the extracted factors are truly independent of one another. This method will allow, in addition, the comparison of all of the extracted factors from the five analyses. Thus it will be possible to investigate the hypothesis that the data collected by the clinical disciplines and that collected from the school yield types of variation which can be inferred to be measures of psychological supplies necessary for successful school adjustment or measures of the effects of inadequate supplies and the inability to use one's resources to solve school learning, interpersonal and personal problems. The procedure which will be used is one of computing factor scores for each of the factors by the Lederman method (Harman, 1960, p. 349). The Lederman method is a complete regression method applied to the reproduced correlations rather than the observed correlations. The advantage of this is that the smaller reproduced correlation matrix reduces the labor of computing the factor scores. If the factor solutions are adequate and the residuals vanish, the results of the Lederman short method for computing factor scores approach those of the complete estimation method.

When factor scores are computed for each pupil for each of the factors, these factor scores will then be correlated to determine the degree of relationship among the factors. If there is considerable agreement across factor analyses, or between factors extracted from different sets of data, we can infer that there is considerable common factor variance and thus the possiblity of real underlying psychological variation which accounts for the relationship rather than method or situational variance. In order to confirm the hypothesis of this project, correlations between factors should be at a significant level, but of moderate value. In other words the factors representing the underlying dimensions in the sets of data which are analyzed are assumed to be unique sources of variation from pupil appraisal. At the same time, in order to rule out the possibility that the factors are method, test or situational variance, they should relate to some criterion of school adjustment, or have considerable common factor variance and be correlated with factors from other methods of appraisal.

A final procedural step will be taken in this project. From the correlation matrix of factor-scores a summary factor analysis will be conducted. This analysis is analogous to a second order factor analysis, but it is different from it in that a second order analysis is conducted from the first order factors from a single set a data. In order to distinguish the analysis in this project from the traditional second order factor analysis, the term "summary analysis" will be applied since the factor analysis will be made on the basis of factors extracted from five rather than from a single analysis of each sample. Since no a priori psychological hypotheses can be drawn prior to the completion of this summary analysis, the methods of the multiple group factoring procedure would not be appropriate. Therefore, a principal factor method (Harman, p. 171) will be applied, and rotation will be accomplished arbitrarily by the Kaiser Varimax method (1958).

AN ANALYSIS OF THE DATA COLLECTED BY THE SOCIAL WORKER

A. The social work home visit

All parents in the study received a notice from the school, informing them that they would be contacted by a research worker. With this as a background, the initial contact with the home was through a telephone call, used to arrange for the home visit. In the unusual case that the parents could not be reached by phone, a brief call at the home was made in order to arrange for a later appointment. On the phone the social worker asked for the person who signed the notice agreeing to participate in the project which had been sent from the school. Since this was usually the mother, most calls were made in the morning. However, when mothers indicated that they worked, or if fathers signed the permit slip, the social worker called on Saturday, Sunday, or in the evening.

When the parent was reached, the social worker identified herself, confirmed the fact that she was talking to the person who signed the permit and reminded the parents of its details if they had forgotten the contents of the school's notice. In general, the following information was used by the social worker to explain the nature of the project. This material was on hand and used to answer questions about the purposes of the research in the hopes that general explanations would insure cooperation and not arouse any unrealistic fears about the outcomes of the interview.

> "The purpose of this research project is to survey a random sample of 2nd grade and 5th grade pupils in order to determine some of the non-intellectual factors which make children successful as well as unsuccessful in school.
>
> "The school and the State Department of Education are working on ways of helping children in school learn more effectively. Part of the study will focus on finding new ways of working with parents which can best help them help their children in school. It is hoped that as a result of the study, factors which are important in helping a child learn more effectively in school can be isolated, and the child who is beginning to have problems and needs special assistance can be identified and helped.
>
> "During the progress of the study, the information which the school has which is useful in planning more effective school programs for children, especially for those who may have some difficulty learning, will be appraised.
>
> "Parents, teachers, businesses, labor unions, and universities are becoming increasingly alarmed by the fact that 30 percent of the children who start school do not finish, even though many of these children have the ability to succeed in school learning tasks. Without a high school education a person has a markedly reduced chance of succeeding as an adult. Many become dependent on society for help, either through unemployment insurance, public assistance, or institutionalization. A large segment of the welfare costs resulting from dependent individuals and families in our State can be reduced only by measures intended to prevent or reduce this problem. This study is based on the assumption that if schools can be helped to be more effective with a larger number of children, we can reduce the educational casualties and increase the number of adults in our population who can function as workers, parents, and citizens."

Obviously, the social worker used only that part of the above material which seemed appropriate for assisting the parents with their understanding of their role in the project. Nevertheless with a standardized explanation of the nature of the research, confidence could be insured regarding the uniformity of presentation of the project goals to parents.

An appointment was arranged during the phone call. If any confusion, ambivalence, or resistance were expressed at this point, the social worker provided the necessary answers, pointed out that no more than an hour would be required, and that the appointment would be made at the convenience of the parent. If suspicion or hesitance continued, the social worker suggested that the school be contacted. Pointing out the research basis of this study, and its possible contribution to such areas as preventing juvenile delinquency and school drop-outs proved helpful.

When the appointment was scheduled, the social worker attempted to indicate suitable conditions for the interview, for example, at a time when the children would be at school and the mother free to respond. Directions for finding the home were requested.

At the end of the introductory phone call, the social worker had collected some valuable information which would be reflected later in her inferential ratings. Specifically, the parent's comprehension and recall of the project, the willingness to respond, the specific objections or questions raised, the coherence of the conversation, the ability to give directions, all could be assessed. These behaviors allowed for clinical impressions of intelligence, resistance, defensiveness, and the like.

B. The social worker interview schedule

The home visit began with the social worker introducing herself, accepting a chair, and readily displaying the interview schedule. This directed the interview into a "getting down to work" setting. The parent was told to feel free not to deal with any questions as she wished, and to give a general reaction, rather than to worry about details. The information collection process began with facts about the child's school life in order to set the tone of the interview and to minimize the implications or threat of the parent's feeling that she was being "analyzed."

Some of the more talkative parents were reminded of the amount of material to be covered and the promised time limit. Criticisms of the type of questions or their relevance were answered by noting that research required information not always immediately meaningful. The problem of privacy, when other adults or the children were in the home could be handled by offering to move to another room so others would not be "inconvenienced." On an occasion or two the parent attempted to involve the social worker in a "counseling" relationship. It is important to note that at no time did the social workers exceed the sanction which had been given at the start of the project - that of gathering information about children which might be meaningful in understanding the relationship of certain factors to school success or failure. The social worker was able to avoid such ploys by the parent by reminding her of the research nature of the project and by continuing to focus on the facts to be gathered on the interview schedule. Nodding, reflecting the statement made, or other non-value judgment responses by the social worker including taking time to hear the parent out when she gave personal, private information about herself were used in order to maintain cooperation. However, the social worker made it clear, by non-verbal cues primarily, that the focus of the interview was on the completion of the interview schedule, not on the problems of the parent.

At the end of the interview, the parent's consent for psychiatric interviewing of the child and a psychological examination could be readily obtained. Written consent was required before any interview or testing sessions were scheduled with the child at his school.

The interview schedule had been designed to collect a developmental history of the child as well as to observe affective responses of the parents in response to certain queries. In general, the schedule covered the following points. (All responses were recorded and specific facts were coded for convenience in preparing the material for data processing.)

Interview setting:
  1. Persons present during interview
  2. Person reporting
  3. Length of interview
  4. Noticeable racial or national factors

School information:
  1. What more can school do to help the child?
  2. Achievement
  3. Can the child do better in school?
  4. Reading materials at home
  5. Family educational goals
  6. Use of library
  7. School contacts by means of PTA meetings
  8. School contacts by means of parent conferences
  9. School contacts by means of Open House

Developmental history:
  1. Pregnancy
  2. Pre-natal medical care
  3. Mother's health during pregnancy
  4. Length of pregnancy
  5. Labor
  6. Delivery
  7. Birth weight in pounds
  8. Health at birth
  9. Feeding
  10. Type of feeding
  11. Feeding problems
  12. Weaned at age (in months)
  13. Age at which bowel trained
  14. Age at which bladder trained
  15. Age at which dry at night

Health factors:
  1. Eating habits
  2. Sleeping pattern
  3. Sleeping difficulties
     a. Nightmares
     b. Insomnia
     c. Sleepwalking
  4. Childhood illnesses
     a. Chronic
     b. Duration of chronic illness
     c. Acute illnesses
     d. Accidents
     e. Surgery
     f. Duration of hospitalization
     g. Number of hospitalizations

Socio-economic factors:
  1. Description of house
  2. Rating of neighborhood
  3. Source of income

    4. Occupation of father
Peer relationships:
    1. Amount of participation with peers
    2. Types of activities
    3. Number of younger friends
    4. Number of older friends
    5. Total number of friends same age
    6. Total number of friends
    7. Sex of friends
    8. Type of relationships with friends
Family relationships:
    1. Mother and child discipline
    2. Father and child discipline
    3. Evidence of consistency in discipline
    4. Type of discipline involved
    5. Sibling and child relationships
    6. Child's relationship to household
Marital status:
    1. Years married, present marriage
    2. Number of divorces
    3. Number of separations
    4. Number of deaths
Religion:
    1. Church membership
    2. Frequency of attendance
Relationship of family to neighborhood
Composition of household
Leisure time activities - child
Leisure time activities - parent

In addition to the above objective data, the social worker obtained some indications of the parent's affective relationship to the child by using a number of questions designed to elicit information about the child at greater depth. These questions were used at the end of the interview:

1. Is there a baby book with the child's pictures? The baby book was reviewed and comments made were noted.
2. Did the mother purchase or use any books on child care?
3. Are there photographs of the child?
4. What is the routine at bedtime?
5. Does the mother read to the child? How often?
6. What did the mother do when the child cried?
7. How many children come into the home to play?
8. How do the parents feel about sex education in the school?
9. Do the parents think the schools should teach about religion?
10. Do the parents think the schools should teach about communism?
11. Do the parents think that all children should go to school, including retarded, physically handicapped, and trouble makers?
12. What should schools do about the trouble makers?
13. Do the parents feel that they have any direct or indirect control over what the school does?
14. What sort of programs do the parents think that the school should have that it does not have now?
15. Do the parents think physical education should be included in school programs?
16. What do the parents think are the characteristics of a good teacher?

C. Summary judgments and their criteria

Obviously all of the above objective information as well as the parent's attitudes about the child and his schooling had to be summarized in some way before the social worker could make any judgments about the presence or absence of certain problems. The psychologists have test scores, the psychiatrists a number of interview observations, but the social workers have a large collection of facts which have to be woven into a picture of the life fabric of the child. Thus prior to making the qualitative judgments which were required for the project, the social worker summarized the interview to a form which required a review of any factors which might have significance for the child's school adjustment. These summary judgments involved noting the presence or absence of physical, psychological or social factors which might have a role in the child's performance in school. Specifically, the social worker was asked to note whether any behavior which was noted or any information which was collected during the interview could have affected the child's development. The social worker used the information collected from the interview, her observations of the home and the neighborhood, and her reflections on the parent's responses to the questions regarding the child's developmental history. All of these perceptions were integrated into a summary judgment about the presence or absence of any physical, psychological or social factor which might have been present in the child's history and which may have been related to the child's school adjustment. The principal reason for the summary judgment procedure is that the specific pieces of information which are collected as part of the developmental history probably have little or no predictive value in themselves. For example, the type of infant feeding, or method of discipline, or procedure for bowel training which occur in a given case is no longer felt to be, in itself, the principal factor causing a particular problem for a child. It is the interrelationship between the particular occurrence and other occurrences and the parent's management or perception of the situation which makes the occurrence a critical incident in the development of one child and an uneventful occurrence in the life of another.

The following summary judgments were used and examples are presented on the criteria which were employed in making the negative ratings. The ratings ranged from "yes positive" (indicating better than the mode of what could be expected in a particular area); "maybe positive," "no," "maybe negative" to "yes negative" (The findings from the interview indicated a real problem in this area.). In practice, the social workers found few cases in which they considered the evidence from the interview to be certainly on the positive side of the continuum. They gave most frequently ratings of "no" indicating a rather uneventful developmental history or one in which no particular negative findings were noted. However, ratings of "maybe negative" and "yes negative" were given to some cases in each of the summary judgment categories. The means and standard deviations for each distribution which ranged from one to five are presented elsewhere. The following list contains the summary judgments and criteria for typical "maybe negative" and "yes negative" ratings.

Type of judgment	Criteria
Physical factors:	
genetic	congenital defects and hereditary factors such as mental retardation, epilepsy, diabetes, etc. e.g. "yes" hemophilia, heart condition "maybe" allergy during infancy one month premature
defects	sensory organ defects, accidents, later developing allergies e.g. "yes" trouble with hearing in one ear; many food allergies; asthmatic, migraines, earaches, convulsions at 3 years

	"maybe"	eczema when a small child, has a slight limp, bronchial asthma when small
conditions		enuresis, sleeping difficulties, eating problems
	e.g. "yes"	chronic sore throat; appendicitis; nightmares; fear of dark; occasional ear infections
psychological factors:		
parent-child relationships past or present		rejection, inconsistency, over-protection, etc.
	e.g. "yes"	evidence from interview that child feels rejected by mother; child thinks mother "did away" with father, father left home; father has little or no relationship to children; over-protective mother; parents very strict
	"maybe"	mother seems to be indifferent about the children; relationship with father "getting closer"; mother says child is more secure around father
other adult-child relationships	e.g. "yes"	domineering grandmother who gave all of information during the interview; resents older step-brother who still lives in the home
	"maybe"	grandparents live in home, but do not seem welcome; repressive grandparents; grandmother disapproves of mother's handling of child
sibling relationships	e.g. "yes"	clashes with older sister, jealous and competitive; resentful of sits; cerebral palsied child in home and some resultant confusions about role
	"maybe"	surrounded by all sisters; a great may siblings; highly neurotic and demanding older sister who is adopted.
peer relationships	e.g. "yes"	competitive with peers; never can share; cannot get along with age or sex group
	"maybe"	has few friends; seeks leadership, afraid of aggressive children; not sure of himself around others; very shy
social factors:		
economic deprivation		family's past or present economic situation including relief status, inadequate housing, food or clothing
	e.g. "yes"	relief status; father's income level low

	"maybe" limited income; poor housing; mother has been ill and family's economic situation has suffered; value standard of family is low; catch as catch can existence
norm conflict	presence of cultural conflict (including possible racial, national, religious, class, or urban-rural factors between family and neighborhood e.g. "yes" terrible looking house in a nice neighborhood; parents leave children to themselves and let them find their own values "maybe" parent accept no responsibility for setting standards for children; possibility pre-delinquent home culture; "nice" home in a very bad neighborhood
social disorganization	community or neighborhood characterized by social disorganization or anti-social patterns e.g. "yes" extremely poor and run-down neighborhood "maybe" family lives in a trailer park
social mobility	family's geographic mobility, including the frequent moving locally or city to city
Global judgment:	If any of the above factors were marked "yes negative" or "maybe negative" the social worker indicated whether such factors were possibly related to the child's school performance. In addition, the way in which such factors were expressed in the child's school performance were also to be noted.

D. The index of social status characteristics

Some objective procedure was needed in order to get an appraisal of those factors contributing to the socio-economic status of the family. Warner and Eells (1960, p. 138-154) provide criteria for four social status characteristics which they feel best indicate the socio-economic level of the family. The four indices are occupation of principal wage earner, source of income, neighborhood and housing. They provide criteria for ratings in each category and suggestions for weighting each of the ratings in order to get a total score which is most related to validity criteria of social status. Each area is rated on a seven point scale from 1 (highest level or best of the class) to 7 (lowest level or poorest of the class). In order to get the total index of status characteristics, the authors suggest weights of 4 to occupation, 3 to source of income, 3 to house type and 2 to dwelling area. Even though the total index was computed for each child, only the four individual ratings were included in the analyses.

E. The social worker's qualitative judgments and related criteria

The following fairly lengthy list includes the qualitative judgments which the social worker made following the completion of the interviews. A rating booklet was provided for each worker in which there was a page for each qualitative rating.

The rating job was to find a child who was most adequate in the dimension being rated (a rating of 1) and write his name in the rating form. Next a child who was least adequate in the dimension being rated was located from the social worker's interviews and his name was written in the rating form at the other end of the distribution (a rating of 5). Next other children who were comparable to the child given a rating of 1, or a rating of 5 were located and they were listed accordingly. Then the social worker ordered the remainder of the list in terms of whether the child was closer to one end or the other of the distribution. After the ratings were completed, the interview schedules were reviewed and objectives describing children who were given ratings of 1, 3, and 5 were listed. From these adjectives, the criteria for each of the ratings were developed. The following ratings and their criteria are separated according to grade level.

1. Criteria for social workers' qualitative judgments - grade 2 boys and girls

a. Does this child have serious physical problems? The initial rating involved an evaluation of the child's health history, physical problems, psychosomatic disorders, and general health. This was rated on a continuum from an uneventful prenatal and developmental history which included no more than the usual childhood diseases without complications and no history of serious or repeated accidents, to a serious somatic history and present related emotional disturbances.

Rating (1) best or most adequate in this dimension of children seen: lively, energetic child with good eating and sleeping habits, generally healthy.
No accidents, no surgery, no illness; never a cold or childhood disease, marked physical endurance; no congenital condition, or, one incidence of illness, accident, or congenital condition no longer active nor meaningful, such as a short period of tonsilitis before T and A, one month premature, minor feeding problems in infancy, strep throat, roseola, measles, mumps, once of fever of 105°. etc.

Rating (2) a minor, but active condition which is not debilitating, or a combination of several past difficulties or one severe problem with no present residue.
Dust allergy, occasional tonsilitis, or ear trouble; a history of two accidents; or a disorder such as a hernia operation at 3 months, infant allergy, plus injury to finger, and the like.

Rating (3) average, typical, at a median level or in-between best and poorest in this dimension: a more serious problem or a more general difficulty with some present residue not overwhelming in effect.
Under or overweight; occasional to frequent colds; thumbsucking; minor speech problem; stomach aches; fussy or compulsive eater; enuresis; ear trouble; convulsions or high temperature; hyperactivity. Light sleeper, or too much sleep; nightmares; toxemic or difficult pregnancy; psychosomatic condition; no serious physical or psychosomatic disorders, but chronic ill health, a history of accidents, stiches, surgery; bronchial pneumonia; operation on testicles; improving migrane headaches with nausea and fears; spinal meningitis at 2 almost fatal, with present ear trouble; history of severe whooping cough and abcesses in chest bone.

Rating (4) a generally debilitating physical condition or a psychosomatic or lesser difficulties in combination:
asthma, fussy eater, recent accident to hand causing some disuse; extreme resistance to eating just overcome and tonsilitis; delicate health, fussy eater, lack of energy; bronchial pneumonia at 6, chronic ill health until then; eneuretic, and sleep used as escape; ear trouble at 3 with convul-

sions, hit by car at 4.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension: active, very serious or debilitating physical and/or psychosomatic condition, with several complications.
Hemophilia plus other troubles; a long history of asthma, allergies, eye trouble, accidents and anxiety; anemic at birth, undiagnosed pains in legs at present, plus diahhrea; whooping cough, stomach trouble, poor eater, anemic at birth. Broken bones plus enuresis; scarlet fever with some residue; facial disfigurement; early long term hospitalization, at present responds to any stress with illness; many ills, congenital heart defect; numerous severe continuing congenital and physical problems; enuretic, severe allergies; severe nightmares; constant thumbsucking and tics; headaches, constipation, diarrhea; pneumonia with after effects; sleepwalking frequently, serious allergies limiting activities; a history of accidents; hearing loss, and speech problems.

In summary, a child rated (1) was generally healthy, energetic, and presented no problems involving physical well being. A (2) rating suggested some slight limitations such as a mild allergy which did not impede development. An average rating (3) covered more general difficulties such as weight or sleep problems. The more serious rating (4) indicated a debilitating physical condition such as asthma, while the (5) rating was reserved for a serious physical condition with complications, such as repeated illnesses involving hospitalization.

b. Does this child's development show deviant psychological patterns? This rating involved an evaluation of the child's psychological development. It was rated on a continuum from no or minimal evidence of psychological problems to the other extreme of clear evidence of behavior problems, emotional difficulties or home factors assumed to severely inhibit the child's adjustment.

Rating (1) best or most adequate in this dimension of children seen: Good adjustment in all areas.
Many friends, good school record, warm parents, accepting, interested, secure; only child, yet parents set limits well; functioning well at school, at home, with friends. No evidence of behavior or emotional problems.

Rating (2) mild or transient psychological problems which would seem to have little effect on the future of the child.
Mild difficulties in one area, home, school or friendships, are compensated for by adequacies in other areas; somewhat shy or slightly withdrawn; occasional mild acting out.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension: long standing mild problems or transient more serious difficulties.
Some lack of healthy aggression or self confidence or independence; an excess of aggression leading to mild social disapproval without being chronic or serious; history of some deprivation or overprotection; family limitations such as the death of father; a demanding father; recent divorce and related upsets; child uncontrolled or ignored; economic deprivation; rigid mother overprotection, inconsistencies; too high expectations; psychosomatic problems; "average" school achievement and social adjustment when more might ideally be expected; home relationships not optimal.

Rating (4) evidence of behavior problems, parental or home limitations of some severity.
Strictness, rejection, inconsistency, disinterest, punishment; poor functioning in school, at home, or with peers; inadequately controlled behavior at home or school.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension: serious behavior problems or inadequate home environment.
Parental limitations of great severity, obviously reflected in child's behavior and clearly evidenced in rejection, hostility, deprivation, overprotection; withdrawn father; inconsistent handling; overly strict parents; early rejection or disinterest; sibling rivalry; child having clear and abundant evidence of disturbance, either acting out or psychoneurotic in nature; spitting and fighting, period of not eating; temper tantrums, extreme sensitivity, can't get along with others; overt hostility and uncontrolled behavior.

In summary, a (1) rating indicated a well rounded child with good adjustment in all areas. A child rated (2) had no more than slight psychological problems such as shyness. The average rating (3) involved more serious or at least long standing psychological difficulties such as chronic passivity, or a serious but presumably temporary disturbance over the parents' separation. The (4) rating was given for home problems such as rejection and inconsistency obviously affecting the child, while the (5) rating indicated serious disturbance such as uncontrolled behavior and constant fighting.

c. The social environment is condusive to poor development. This item evaluated housing, neighborhood, and cultural values of the family. The judgment here was fairly subjective but included some of the following objective criteria: Housing was rated in terms of standards of housekeeping. An extremely messy house was rated as an undesirable environment despite the superior intellectual traits of the parent which may have existed concurrently. The neighborhood was evaluated with regard to the parents' feelings about it and/or their ability to protect the child from negative influences in it. Observable differences in the neighborhood from standards expressed by the parents were also evaluated. The cultural values of the parents were assumed to be reflected in their intellectual ability or inclinations and the objectivity of their attitudes generally. Such specific factors as a place for the child's indoor and outdoor activities were noted.

Rating (1) best or most adequate in this dimension of children seen.
This covered such factors as a good neighborhood, a comfortable and pleasant home, plus support in the family for achievement. Cultural and civic activities, a warm home; association with neighbors, expectations within child's ability; a good neighborhood, close family ties; good peer relationships and positive cultural values and activities; cheerful home, family hobbies.

Rating (2) mild disadvantages along with the advantages noted in an optimal rating.
Lack of space; a sibling with a problem; no children to play with.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Several mild disadvantages or one serious limitation not offset by strengths within the home, average neighborhood, average housing, some peer rela-

tionships, but not optimal for family; some activities and associations, some disinterest and distrust in the home; a disturbed sibling not too well handled; expectations too high; home crowded and child limited by lack of space.

Rating (4) some degree of disadvantage such as isolation, parental illness, deprivation in home, income, etc.
Limited family interests in spite of child's needs for enrichment; home marginal.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension: severe home problems.
Extreme poverty; highly disorganized household reflecting confusion or very low standards for the environment; poor neighborhood; commercial or isolated neighborhood; house and yard umkempt; deprived housing, very low income; limited family interests, no friends; sick parent.

In summary, a child was rated (1) when his home appeared to be pleasant and supportive. A (2) rating covered the combination of some mild disadvantages with positive home factors, such as no friends in the neighborhood. An average rating (3) suggested limitations which were not counterbalanced by family strengths, such as an overcrowded home. The (4) rating indicated some degree of limitation, such as parental illness, while the (5) rating was typically used for homes with severe limitations, such as extreme poverty.

d. This is a family which could produce a child with problems. The criteria here covered such aspects as the parents' composure, objectivity, ability to give both emotional support and to set limits, general intelligence, and warmth, but not necessarily to an outstanding degree. The above factors were considered attributes of parents who could leave a child free to develop the accepted balance between conformity and independency, acceptability and self-reliance, and acceptance of authority and individuality or creativeness. Equal weight would be given the parent who could be a little overwhelming in convictions, brilliance, attractiveness, and the parent who was uninspiring.

This item also covered the presence of one very bad parent, in the sense of an extremely bad example-setter such as the rough, overly-aggressive, or slightly sadistic parent, or an unstable parent, even when the other parent was "strong." The judgment was affected by whether the "problem parent" was the same sex as the child. Overall rating of (1) and (2) stressed the initial criteria noted above, with the mid rating (3) reflecting nothing special or all the above balanced with no one bad or good attribute. The problem parent led to a rating of (4) or (5).

Rating (1) best or most adequate in this dimension of children seen.
Seemingly well-balanced parents, generally supportive, and neither overprotective, overbearing, dominating, neglectful, or punitive; intelligence about school's relationship to child, no unfair pressure on child; satisfied with child; adeqpate out-lets; good marriage, easy give and take understanding; good academic achievement of parents; wholesome family relationships.

Rating (2) family standards may be a bid higher than those the child can meet.
Family stress indicates some repression of feelings; not an academically oriented family.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Child's potential higher than performance; rigid standards; father away a lot; high expectations, repression of feelings stressed; sibling problems; divorce; low economy; "pushy" family; "don't care" family; family disables children psychologically; not academically oriented although child would definitely profit from such support.

Rating (4) some family problems.
Early marriage, financial pressure; excessive control; parental conflict; low cultural interest and indifference.

Rating (5) poorest of cases seen, indicative of least adequacy in the behavioral dimension.
Severe family problems such as all older siblings doing poorly in school; severe parent conflict; great deal of pressure on child; child rejected; unwanted children; harsh discipline; few outlets offered in home; parents too young to accept responsibilities; overcontrolling parents; culture conflict.

In summary, children rated (1) had parents who seemed well adjusted and accepting of the child. A (2) rating suggested some slight disadvantage, such as pressure for achievement which might be a bit beyond the child's ability. An average rating (3) indicated a less than optimal family with such difficulties as a divorce, or sibling problems. A rating of (4) suggested a family with limitations such as a low cultural level, while a rating of (5) indicated clear signs of an inadequate family, or frank rejection of the child.

e. This child has serious personality problems. This item was rated on a continuum from evidence of social adjustment and resourcefulness, or talents for constructive activity, to extremes of action out or neurotic behavior.

Rating (1) best or most adequate in this dimension of children seen.
Child is alert, energetic, pleasant with a composed personality; happy child, with friends, close family, school success; relaxed, independent, interested; outgoing without aggressiveness; able to share, friendly, reasonable; expresses feelings without guilt; good family and peer relationships; good achievement.

Rating (2) less of the factors noted above, or similar factors coupled with less self confidence, mild school problems, or mild problems with peers.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Child who handles himself fairly well despite some personality discomfort; some nervousness, mild acting out behavior; compulsive cleanliness; allergies; poor sleep pattern; introvert, dreamer; self-centered; compulsive; can't take responsibility, psychosomatic illnesses; problems in learning, problems in sustaining friendships, but otherwise a curious mind, active, not easily upset.

Rating (4) definite limitations in one or more areas.
tearful child; child who plays alone; unhappy child.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Child with acting out or psychoneurotic problems badly in deed of psychotherapeutic intervention; pains in legs, child spits; serious allergies; child can't get along with others, few friends; sensitive, shy, nervious; needs excess attention, few friends, insecure; poor school performance, unhappy, dissatisfied, fearful; psychosomatic complaints results in some incapacitations; acts out impulsively; withdrawn, guilt ridden; possible psychosis; extreme problems in identification; possible homosexual tendencies.

In summary, the (1) rating was reserved for children notably well adjusted, with success at school and at home. The (2) rating suggested less success, but no real problems. The average rating (3) was reserved for children with mild but not incapacitating problems, such as nervousness or allergies. The negative ratings indicated serious emotional problems, with (4) suggesting such difficulties as social isolation, or unhappiness, and (5) indicating a child whose emotional difficulties are severe enough to indicate a clear need for intervention, even suspected psychosis.

f. This child has school adjustment difficulties. This item was based on the material utilized in item e (personality) contrasted with the social workers' estimate that such behavior was or was not reflected at school, or that he was doing fairly well at school even though he was having problems as compared to other children.

Rating (1) best or most adequate in this dimension of children seen.
Child manages well at school socially, no evidence of trouble; doing well, loves school, likes teachers, gets along with peers; good achievement, good peer and family relationships.

Rating (2) some slight problems in school, or only average in school but making the most of ability.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Something of a dreamer; doesn't apply himself sufficiently; doesn't pay attention; difficulty concentrating, lack of self discipline; unable to function with authority; trouble coping with peers; learning difficulties; easily upset, competitive; reading problems.

Rating (4) not too happy at school; somewhat restless; misbehaves; more serious learning problems; poor attendance; conflict with peers; limited adjustment to school in cultural, economic, or academic terms.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Irrational, uncontrolled; unacceptable, "fall guy"; poor grades and poor attendance; culturally, economically, academically unacceptable, unable to fit in; restless and misbehaving.

In summary, the (1) rating indicated a child with considerable school success, while the (2) rating suggested no more than slight school problems, such as a bright child achieving well but below his potential. The average rating (3) indicated a more generalized school problem such as difficulty concentrating. The (4) rating suggested school difficulty which might later produce a "drop out." The (5) rating indicated severe school problems such as classroom misbehaving to the point of threatened exclusion.

g. This child has school learning problems. This item was based both on reported grades and on the parents' expectancy, or how they evaluated the child's effort versus his potential.

Rating (1) best or most adequate in this dimension of children seen.
Above grade or mostly A's; doing well, loves school, achieving up to ability; very good achievement, good peer and family relationships.

Rating (2) somewhat above grade; constructive interests; good reader; not necessarily above grade; not up to full potential; a specific problem such as reading, writing or spelling being overcome at present time.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Average grades, held back by school problem (reading, arithmetic, or spelling); not up to potential; some disinterest; could do better; average improving from poorer work; picking up with remedial help.

Rating (4) average grades but distinct trouble in reading; still behind grade but doing better now; at grade level but very poor participation; child can't focus on subject; needs lots of help, but close to grade level; doesn't finish work, doesn't apply himself sufficiently.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Poor grades, below grade achievement; very poor concentration; very poor cooperation; has been held back for poor ability or achievement; still not improving in spite of help; needs tutoring or remedial help; low achievement, slow to catch on; blocks on learning tasks; will not hand in work, doesn't apply self.

In summary, a child rated (1) had an excellent school record; one rated (2) might be unable to reach his fullest potential but still doing quite well. An average rating (3) indicated a child with average grades, or one overcoming mild school problems. The (4) rating was reserved for a child with a clear-cut problem, such as reading. The (5) rating indicated serious school problems such as markedly low achievement or recent retention.

2. Criteria for social workers' qualitative judgments - grade 5 boys and girls
a. Does this child have serious physical problems? At this age level, the range of ratings covered children with no history of serious illness or accidents, plus an uneventful prenatal developmental history, to a child with serious somatic history.

Rating (1) best or most adequate in this dimension of children seen: absences of somatic disturbance, past or present; healthy eats and sleeps well.
No illness or accidents; never sick, never a cold; no childhood diseases; plenty of energy.

Rating (2) past incidence of somatic disturbances but not bothering the child at present.
Once lingering or chronic maladies such as bronchitis, ear trouble, sore throats, anemia, accidents possibly requiring a frustrating convalescence, or one accident perhaps requiring prolonged treatment or bed state clearly clearly result of impetuousness or hyperactivity. Possibly no after effects, but these could not be ruled out.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension: mild psychosomatic complaints or a history of various disorders possibly not operative at present.
Allergies, asthma, bed wetting, eczema, sleepwalking, repeated eye operations, removal of blemishes with protracted care; usually a combination of minor disorders, or one highly active one, but fairly peripheral to child's personality; early allergies; sleep disturbance; early asthma; over eating; fainting; accident prone; nail biting; under or overweight; visual difficulties; speech difficulties, chronic cold; thumbsucking; psychosomatic; difficult pregnancy.

Rating (4) children with one fairly prominent physical symptom.
Accident prone; serious history of malnutrition or neglect, perhaps not present now.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension: grave physical disorder with concomitant emotional features.
TB with hospitalization, recent malnutrition, high anxiety, weeping, fears, foster home; enuresis; speech defect; asthma; chronic tonsilitis; chronic ear trouble; allergies, sleep problems; eating problems; headaches; constipation; tics; numerous somatic symptoms, frequently ill; numerous severe continuing congenital and physical problems.

In summary, a (1) rating indicated general good health and energy; a (2) suggested previous illnesses no longer a problem. An average rating (3) indicated mild present psychosomatic complaints, or serious health problems in the past with some residuals. A (4) rating was limited to a present physical problem or a serious past problem such as malnutrition, while a (5) suggested grave physical disorders with present disabilities or complications.

b. Does this child's development show deviant psychological patterns? This item covered a range from no evidence of adjustment problems to clear evidence of such related factors as fighting, timidity, immaturity.

Rating (1) best or most adequate in this dimension of children seen: good adjustment in all areas.
No problems; happy child, many interests, family close and proud of child; well adjusted child with accepting, interested parents; well accepted by family, school and neighborhood; a much wanted child; positive developmental history; absence of anything negative; composure, self confidence.

Rating (2) mild or transient psychological problems which would seem to have little effect on the future of the child.
mild problems well compensated for, or less strength than child rated as optimal.

Rating (3) average, typical, at medial level or in-between best and poorest in this dimension: long standing mild problems or transient more serious difficulties.
Average in not being outstandingly free to express hostility, but not being overwhelmed by the need; some lack of healthy aggression; some lack of confidence; over protected; a little too aggressive for consistant social approval, without being serious; parental aspirations making for some present difficulty; rigid mother, strict parents, high expectations;

divorce; family sex identification; psychosomatic; lacks ability to compete.

Rating (4) evidence of behavior problems, parental or home limitations of some severily.
Less stability in the home, rejection and discord reflected in child's behavior; dependent; some behavior problems; neurotic trends.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension: serious behavior problems or inadequate home environment.
Clear evidence of rejection by parent, hostility, deprivation, or over protection; withdrawn and rejecting father, marital discord or divorce; mother alcoholic; sibling rivalry; erratic behavior, withdrawal, intropunitive; overly aggressive; behavior problems; neurotic tendencies, excessive "hurt feelings"; jealousy; attention seeking, dependent; clung to bottle every night until ten years old.

In summary, a child rated (1) was happy, composed, and confident; a rating of (2) covered the child with mild problems which were not debilitating. An average rating (3) suggested some chronic problem such as a lack of confidence. The (4) rating indicated some neurotic trends while a (5) revealed severe behavior problems or neurotic tendencies.

c. The social environment is condusive to poor development. The home, the neighborhood, and the cultural values of the family were rated here. Standards of housekeeping even though not extreme in either direction would be evaluated in terms of the total rating. The parents' ability to adjust to the neighborhood with their acceptance of it, or their ability to protect the child from its negative aspects were also important. Differences between the parents' values and those of the neighborhood, plus their perception of such values were rated. Cultural values were evaluated in terms of the degree of intellectual ability or inclination of the parents, and the objectivity of their attitudes generally.

Rating (1) best or most adequate in this dimension of children seen.
Many activities; community interests; cultural interests; adequate friends; happy in neighborhood; parents warm, average home; friends with neighborhood; expectation within ability. Above average housing and neighborhood; wholesome activities and associations.

Rating (2) mild disadvantages along with the advantages noted in an optimal rating.
minor problems in the home, insufficient number of children for companions; neighborhood out of phase with parental standards; parental standards not quite being met by child.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Disinterest in cultural and intellectual values; a disturbed child in the family; lack of peers; isolated environment; some family activities; small group of friends.

Rating (4) considerable conflict between parental standards and environment; home not in keeping with neighborhood; parents not acceptable to others.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.

Poor housing; no friends, no outside participation, isolation; alcoholism in home; lack of values; mother controls home; no outside association except with religious group; boy doesn't like father; spotless house, no mess allowed.

In summary, a rating of (1) indicated a wholesome home environment, while (2) suggested no more than minor problems such as a neighborhood differing from parental standards. An average rating (3) pointed to more serious limitations in the environment, such as the absence of friends. A (4) rating suggested environmental conflict for example parents versus neighbors. A (5) rating indicated a disturbed home with such factors as alcoholism.

d. This is a family which would produce a child with problems. This covered the degree to which a parent revealed composure, objectivity, ability to set limits and give emotional support, general intelligence, and sufficient but not overpowering warmth. The above features were considered to lead to a balance between conformity and independence, self reliance and acceptable of authority, individuality and sociability. Both parents were rated either from direct observation or from inferences made from one parent's interview responses, but the presence of one very bad parent, particularly the principal identification figure, would limit the rating.

Rating (1) best or most adequate in this dimension of children seen.
Close family, happy family, proud of child, unity of goals; good marriage, family a unit, easy give and take, understanding; child learns well, gets along well with friends.

Rating (2) mild disruption in family, such as occasional absence of father; family expectations a bit of a strain for the child.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Expectations too high, mother rigid, rejects one child, parents strict; sibling problems, disorganized home, divorce; low economic factors, disinterest in school; repressive home; average.

Rating (4) some family problems.
Family demands are excessive, and limiting to child; conflict in home; some illness which affects child.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension:serious family problems.
Twin in special school, father a perfectionist; pressure on child; inconsistent handling, marital discord; rejecting parent; extreme parental conflict; illness, alcoholism; low cultural interest; child reveals paranoid attitudes like father.

In summary, a (1) rating suggested a close, happy family unit; a (2) rating indicated no more than mild family disruption, such as father's absence on his job. An average rating (3) suggested a more general family problem such as emphasis on repression or over-strictness. A (4) rating indicated family problems more directly limiting the child, such as parental illness, while a (5) rating suggested a combination of family problems which reflected on the child.

e. This child has serious personality problems. At the positive pole of this rating were evidences of the child's ability in social adjustment, the presence of specific talents or resourcefulness, and the absence of signs of pathology.

Rating (1) best or most adequate in this dimension of children seen.
Self sufficiency, creative play, leadership, good grades; happy, creative many interests, well liked, good self concept; friendly, warm; working up to capacity; reasonable; expresses feelings without guilt; extroverted without being aggressive; good school achievement; wholesome family and peer relationships.

Rating (2) inhibition or repression mildly blocking freedom or self assurance.
Excellent school success but some peer problems; not working up to ability; over values school success, straining in this area.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension: well rounded even with mild acting out, or mild nervousness. Personal discomfort but not particularly disabling; self centered; does not take enough responsibility; problem in sharing; compulsive traits.

Rating (4) evidence of some maladjustment at home or at school.
Presence of psychosomatic symptoms; distructive fantasies, fearfulness; acting out behavior--chronic quick temper, poor sportsmanship, hypersensitivity; conflicts in some but not all areas of present existence.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension: extremes of acting out or neurotic behavior.
Chronic school adjustment problem; very frustrating home situation, behind in school, no friends; poor self concept, few friends, self punitive, dreamer, beligerent; acting out, impulsive, uncontrolled, withdrawn, guilt ridden; many conflicts, paranoid tendencies; psychosomatic ailments; either no areas without conflicts, or such severe limitations in one or more areas that the child's strengths are of little value.

In summary, a child rated (1) appeared to be friendly, interested, and well liked. A (2) rating suggested a child mildly inhibited or repressed [illegible] otherwise adjusting well. An average rating (3) indicated a child with some personal discomfort or difficulty. A (4) rating suggested a child with more serious difficulties such as hypersensitivity or a number of conflicts. A (5) rating indicated a child showing extremes of neurotic behavior or a conduct disorder.

f. This child has school adjustment difficulties. This item called for a judgment on the part of the rater of the extent to which personality problems such as noted above were invading school areas. This involved some estimate of the interaction between abilities (intelligence, work habits) and emotional problems. One might well off-set the other.

Rating (1) best or most adequate in this dimension of children seen: good achievement, friends, many interests, well disciplined, outgoing.
Polite, well behaved; gets along with teacher, gets along with peers; bright, achieving; cooperative, friendly; can balance achievement and social life.

Rating (2) some lopsidedness, such as minimizing school achievement for friendships, or the reverse, without serious limitations.
Mild emotional problems balanced by school success which presumably minimizes noted problems; not working up to full ability; slightly

immature; could improve in school adjustment, even though better than most.

ating (3) average, typical, at median level or in-between best and poorest in this dimension: Mild, slightly limiting problems.
Somewhat shy, immature, restless, doesn't concentrate; can be easily upset, competitive, lacks self-discipline; withdrawn; average, in spite of such minor difficulties as noted above.

ating (4) problems noted above are more pervasive and limiting.
More invasion of the above in school achievement, more serious learning problems; poor attendance; conflict with peers.

ating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension: unable to fit into school program.
Unhappy, doesn't like school, no peer group; behavior problems, teacher complaints; irrational; hits other children without reason; not accepted by peers, teased unmercifully; defenseless; a boy who plays with girls; excells in studies at great cost to other areas.

In summary, a (1) rating indicated good achievement combined with social ("polite") ehavior; a (2) rating suggested some slight lag, such as emphasis on one area of chievement at the expense of the other. An average rating (3) indicated more mild, lightly limiting problems. A (4) rating suggested more serious problems, or a combinaion of problems. A (5) rating indicated a child obviously not accepted in school, uch as a bully or "teacher's pet."

g. This child has school learning problems. This item could be based on reported rades, but at this age level it also represented the summation of five years' school xperience. Gradations were based on the social worker's estimated ability of the hild and how this compared to grades and to parents' expectations.

ating (1) best or most adequate in this dimension of children seen: bright child doing well in school.
Above average; A's, double promoted; excellent grades, parents pleased, working at capacity, above grade; excells in learning, although lacking in peer relationships; orientation is scholastic.

ating (2) average but working at capacity.
Slightly lopsided in school achievement; good reader but slightly lagging elsewhere; constructive interests but not now doing as well as he might in grade -- may be a current minor setback.

ating (3) average, typical, at median level or in-between best and poorest in this dimension: no school problems.
Average grades, parents satisfied; somewhat disinterested; doing o.k. but could do better; improving, slight reading problem; children with this rating of school learning problems ran a range from bright but not achieving, to above average, to average ability, average achievement, to slow, but doing well.

ating (4) School difficulties in certain areas.
Distinct trouble in reading, yet average grades; behind grade but progressing; poor participation; can't focus on subject; could use help but manages to scrape along.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension: serious school problems.
Not achieving in spelling, reading, arithmetic; achievement far below potential; below grade level, poor grades; dull, little ability; grade retention without any improvement; getting remedial help but no notable effect; very poor cooperation and achievement in school.

In summary, a child rated (1) was doing well in school and pleasing his parents; a rating of (2) indicated a child with a slightly uneven school achievement; an average rating (3) suggested an average child with nothing special in his achievement. A rating of (4) indicated clear school difficulties, such as inadequate participation, and poor achievement, while a (5) rating indicated a child with serious school problems such as achievement far below potential.

F. Hypotheses related to the social worker data

A rather wide range of research studies are available which relate social factors to personality maladjustment and psychological disorganization. Only a few will be mentioned here. In spite of the fact that middle class children have been identified as having a greater capacity for anxiety than lower class children, a study by Sewell and Haller (1959) shows that lower class children tend to be more concerned over class status and exhibit more symptomatic behavior than do those of the middle class. Educational attainment of the father and his occupational status have also been shown to be related to personality maladjustment in children (Burchinal et al, 1958). The anti-social behavior of the parents is related to anti-social characteristics in children probably as a result of the father's low occupational status (Robins et al, 1962). Even when attempts have been made to control variables of size of family, intelligence and age of children in a culturally homogeneous group, social status appears to have a low, but significant relationship to the child's personality adjustment (Sewell et al, 1956). The long range developmental studies of Nancy Bayley and her staff have made more specific the relationship between social class variables and the behavior of mothers toward young children (1960). In her study of 56 normal children mothers of higher socio-economic status tended to be more warm, understanding and accepting while those of lower class status were more controlling, irritable and punitive.

The specific relationship of housing environment and mental health has been studied by Wilner (1956, 1959). Variables such as the quality of the housing and density of occupants have a positive relationship to the mental health status. Even though it is possible to get fairly objective measures of social class and socio-economic status as well as housing quality, it is the interaction of parent and child which has a more direct relationship to the child's adjustment outcome. Becker (1959) showed that the mothers of conduct problem children tended to be arbitrary, thrwarting, and give vent to unbridled emotions while the fathers tended to be inconsistent in enforcing regulations. When families are studied in terms of ability to function in individual relationships, relationships in the family, child care, social activities, economic activities, household practices, health practices, and use of community resources (Geismar, 1962) family disorganization appears to be most related to inadequacies in interpersonal relationships, child care, and family relationships. The inference from this study is that as incompetence in managing the relationships in the family increases, it effects the family's ability to provide for adequate health, food and shelter.

Two studies are of interest in relating physical factors to adjustment status. Though both these studies were conducted with adult populations, some generalizations can be made to a childhood group. Laird (1957) shows a relationship between physical handicaps and emotional disturbance. Hinkle et al (1959) in a large study of almost 3000 subjects conclude that man's relationship to his social environment as perceived by him has a profound effect upon his health, influencing the development and progression of all forms of illness regardless of their etiologies. As a group, persons who experience "difficulty" in adapting to their social environments have a disproportionate amount of all the illness which occurs among the adult population.

Generalizations from the above studies to the current project are somewhat limited. Since they use a variety of definitions of "adjustment", "disorganization" and "disturbance". In addition the samples may differ in terms of age, sex and representativeness. The generalizations which can be made, however, are that physical, psychological and social variables such as the ones collected for this study have a potential relationship to the adjustment of 7 and 11 year olds.

Hypotheses about the factors which should emerge from an analysis of these data are difficult to state since no comparable studies have been made. Three related factor studies of the Fels Parent Behavior Scales utilize a number of variables quite different from those contained in the proposed social worker factor analysis; however, they are of interest in that the factors extracted may be found later to be similar to ones which might evolve from this proposal. Roff's (1949) factorial study of the Fels Parent Behavior Scales was published in 1949. Subsequently Becker et al (1959) replicated his procedure with problem families and non-problem families. They found substantial agreement with Roff's original factors when variables relating to mother and children and those relating to father and children were analyzed. In problem families the mother and child factors were parent-child harmony, protectiveness, democracy, permissiveness and sociability. The father-child factors were parent-child harmony, protectiveness and democracy, but a factor called general activity and warm extraversion vs hostile withdrawal in place of sociability and permissiveness emerged.

Lorr and Jenkins (1953) took the factors derived by Roff and subjected them to a second order factor analysis. Three factors were found and described by the following questions: 1) how far does this home sustain and encourage dependence? 2) how far do the methods of child training reflect democratic practices or values? 3) to what extent is there strict orderliness in the home or to what extent is the home relaxed and unorganized. These second order factors are more in line with the qualitative judgments made by the social workers in this project which describe the psychological environment in which the child has been reared.

A socio economic factor should emerge from the factor analysis of these data. A health factor may be extracted, but its appearance would be inhibited by the fact that only four variables define this possible dimension, and the fact that the social workers found it difficult to distribute ratings of health factors in more than an either-or fashion. Certainly a main factor to be found in the analysis would be a psychological factor related to the family environment, and the child's developmental history. If social or familial factors do emerge, they should be positively related to the adjustment status of the child.

G. Results of the analysis of the data

Four factor analyses of the data were made on the basis of age and sex. In each case the factor analysis was based on 11 summary judgments made by the social workers, immediately following their interview with the parent. The reader will recall that in order to make these judgments the social worker had to review the findings of the interview, evaluate possible evidence for any difficulties in the child's physical and psychological development and determine the existence of social problems. In addition, a global rating was made which required deciding whether any of the problems noted in the physical, psychological or social domain might be related to the child's school adjustment.

The next set of variables were the objective ratings of the type of house, the neighborhood, the source of income and the occupation of the principal wage earner.

Finally, the analysis included the seven qualitative judgments made at the end of the interview in which the social worker ranked each of the families with respect to each variable. The first 16 variables were ratings made at the time of the interview or shortly thereafter; the final seven variables were ratings made at the end of all of the interviews by comparing and ranking all of the families on each characteristic.

The means and standard deviations from the summary and qualitative judgments for all samples are presented on Table 1. The mean rating listed, for each summary judgment on the table provides an indication of the degree to which any of these factors were present in the parent interviews. The ratings of the presence of physical factors were relatively difficult to make as indicated by lower means. These distributions indicate either an absence of data indicative of health problems or a lack of emphasis in the social worker's procedures on interview techniques which would have uncovered enough differences among the family's reports of the child's physical condition to make for broader distributions. The mean ratings for psychological factors suggest that these variables are ones which the social worker can more readily evaluate and distribute along a continuum. Social factors again suggest difficulties in ratings when the mean ratings are checked. If any of these summary judgment variables are to be retained in social worker interview procedures, certainly a more thorough review of the criteria and of interview techniques designed to elicit information relative to the ratings would be necessary.

Ratings of the four variables constituting the index of social status characteristics fall into the middle of the rating distribution. Here again rather extensive criteria were provided which were easily applied to judgments of income, occupation, housing and neighborhood. The means and standard deviations of the qualitative judgments suggest also that distributions of ratings over a five point continuum are feasible when procedures for ratings and appropriate criteria are applied.

The correlation matrices in which the interrelationships of these variables can be found are presented on Tables 2, 3, 4, and 5. The factor structure for all four samples is presented on Table 6. Since the criterion of simple structure is met fairly well by the cluster analysis procedure as indicated by the pattern of loadings of each variable on the factors, no rotations of axes were made. Also the factor structure for each sample was fairly comparable suggesting that real rather than chance variation accounts for the results. The similarity of the factor analyses for each group also indicates that the results from this study could be replicated in other samples. If the findings were to be replicated in another project, and if the results were comparable to those presented here, one could generalize that the types of variation in the social worker procedures are truly representative of the *modus operandi* of this clinical discipline in making appraisals of parents' relationship to children. However, in the absence of replication, the comparability of the results for all samples is good evidence that the factors which were extracted do represent the organization of the perceptions of the social worker in this particular type of clinical assessment.

The factors which were extracted and their interpretations are presented for each sample:

1. Results of factor analysis of social worker data for 2nd grade boys

a. Factor 1. School maladjustment with cultural deprivation. Four main variables define this cluster. They are problems in peer relationships, economic deprivation, social disorganization, and a judgment by the social worker that problems noted during the interview were related to school adjustment difficulties. In addition, problems in sibling relationships, norm conflict and social mobility are moderately loaded on this factor. The interpretation of this factor is one of social and school adjustment difficulties with cultural deprivation.

b. Factor 2. School maladjustment with emotional and social deprivation.

The cluster variables for factor 2 are deviant psychological problems, a family which would produce a child with problems, a judgment of serious personality problems and school adjustment difficulties. In addition, the occupation of the father, evidence of serious physical problems, a poor social environment and predicted school learning problems are also moderately loaded on this factor. The interpretation of this factor appears to be one of school adjustment difficulties with emotional disturbance. In addition, a father from lower economic strata, and a family living in a poor social environment are also implied in this factor interpretation.

c. Factor 3. Socio-economic status. The indices of social status characteristics, description of house, the rating of the neighborhood and the occupation of the father in addition to a qualitative judgment by the social worker that the social environment would be conducive to poor development are the variables in this factor cluster. In addition, the other index of social status characteristics, source of income, receives a high positive loading on this factor.

d. Factor 4. Problems in adult-child relationships without adjustment difficulties. Three variables are found in the factor cluster for dimension 4. They are deviations in parent-child relations, deviations in other adult-child relations, and a rating of serious personality problems. Evidence of serious physical problems is negatively loaded on this factor. The implied need for adults when such physical conditions are present would be reflected in better relationships. The interpretation of this factor which has no loading of any of the school adjustment ratings appears to be difficulties in adult-child relationships or possibly authority problems.

2. Results of the factor analysis of social worker data for 2nd grade girls.

a. Factor 1. School maladjustment with emotional and social disturbance. Ratings of deviant psychological development, a family which would produce a child with problems, serious personality problems, school adjustment problems, and school learning problems are the variables in the first factor cluster. In addition, the remainder of the social workers' qualitative judgments are loaded on this factor. Also to be found in this first factor are judgments of deviations in parent-child relations, economic deprivation, norm conflict, social mobility, description of the house and the rating of the neighborhood. The interpretation of this factor is that it is general maladjustment manifest in school problems related to both psychological and social factors.

b. Factor 2. Maladjustment with cultural deprivation. This cluster is composed of problems in sibling relationships and problems in peer relationships. In addition, evidence of economic deprivation in the home was also observed, and data collected during the interview were judged to be indicative of school problems. The interpretation of this factor is one of difficulties in interpersonal relationships with peers and sibs which are present in a poor economic environment.

c. Factor 3. Socio-economic status. The cluster contains three of the four ratings of social status characteristics and the fourth, occupation of father, is positively loaded on the factor. In addition, the social worker's judgment of the fact that the social environment was conducive to poor development and evidence of social mobility in the family were also found in this dimension. The interpretation of this factor is socio-economic status.

d. Factor 4. Social conflict. Three variables are found in this cluster. They are presence of norm conflict, evidence of social mobility and the judgment by the social worker that problems noted during the interview would be related to school adjustment. This factor is interpreted as social conflict.

3. Results of the factor analysis of social worker data for 5th grade boys

a. Factor 1. School maladjustment with cultural deprivation. This factor cluster contains judgments of poor peer relationships, evidence of economic deprivation in the home, presence of norm conflict of the family with the neighborhood and community, and a global judgment that problems uncovered during the interview which were thought to be related to school adjustment. In addition to these cluster variables, the presence of social mobility, deviations in psychological development, and evidence of serious personality problems were also loaded on this factor. The interpretation of this factor is school adjustment problems with cultural deprivation.

b. Factor 2. School maladjustment with emotional disturbance. The qualitative judgments of deviations in the child's psychological development, a family which could produce a child with problems, serious personality problems, and social worker predictions of school adjustment difficulties are the variables in the second factor cluster. In addition, the rating of the house, physical problems of the child either in the present or the past, judgments of a poor social environment, and school learning difficulties are also loaded on this factor. The interpretation of this factor is school adjustment problems with deviations in the child's psychological development where the etiology of the problem may rest primarily on the family environment. School maladjustment with emotional disturbance is suggested as an appropriate title for this factor.

c. Factor 3. Socio-economic status. The description of the house, occupation of the father and the rating of the neighborhood in addition to a judgment of a poor social environment make up the cluster variables. Also loaded on this factor are the source of family income, and the presence of some physical problems in the child's history.

d. Factor 4. Social problems without adjustment difficulties. This cluster is quite interesting since it contains most of the variables which are in Factor 1 above, but in a different relationship. Evidence of peer problems, and economic deprivation are inversely related to presence of norm conflict and the evidence of school problems. This pattern suggests social and economic difficulties which are not related to school adjustment difficulties. The interpretation of this factor is social problems without school adjustment manifestations.

4. Results of the factor analysis of social worker data for 5th grade girls

a. Factor 1. School maladjustment with cultural deprivation. This first factor cluster contains the variables which rated peer relationships, indications of economic deprivation, norm conflict and positive evidence of such problems being related to school adjustment. In addition, problems in sibling relationships, social disorganization, social mobility, a judgment that the family could produce a child with problems, and evidence for school adjustment and school learning problems are also loaded on this factor.

b. Factor 2. School maladjustment with emotional and social disturbance. The four main variables in this cluster are deviant psychological problems, a judgment by the social worker that the family would produce a child with problems, evidence of both serious personality problems and school adjustment problems. In addition, a poor social environment and school learning problems were also loaded on this factor. The interpretation of this factor is school adjustment difficulties with emotional disturbance.

c. Factor 3. Socio-economic status. The description of the house, the neighborhood, the source of income are the social status characteristics in this factor cluster. The other variable in the cluster is the social worker's judgment of a poor social environment. In addition, the occupation of the father and noted physical problems are also loaded on this factor.

d. Factor 4. School learning problems. This factor has two cluster variables - the presence of physical conditions such as enuresis, sleeping difficulties or eating problems and social worker estimates of school learning problems.

This factor is probably best interpreted as school learning difficulties with lower physical health or somatic difficulties without adjustment problems. The obverse of these variables is possibly intelligence and health without adjustment implications.

e. Factor 5. Problems in parent-child relations without adjustment difficulties. Two variables define this cluster, but are inversely related to each other. The first, deviations in parent-child relations, is inversely related to evidence of social disorganization. In addition, social mobility is negatively related to this dimension. The occupation of the father and evidence of serious physical problems are the two remaining variables with a moderately positive loading on this factor. This factor appears to be difficulties in parent-child relationships, evidence of health problems, a father from lower socio-economic strata but an absence of social disorganization and social mobility. It is a factor which reflects possible problems in development without school adjustment or personality manifestations.

H. Summary of the results of the factor analysis of social worker data

Three comparable factors appear in all samples from the factor analyses of the social worker judgments. Deviant psychological development, a family which would produce a child with problems, school problems and personality problems are the primary variables in the first factor. Social problems and low occupational status are often found. The interpretation of this factor is one of school maladjustment with emotional and social disturbance.

A second factor contains variables rating the evidence of social problems, economic deprivation, problems in peer relationships, school adjustment difficulties and norm conflict. This factor can be interpreted as school maladjustment with cultural deprivation.

Though the selection of terms to describe the factors is highly arbitrary, the variables in two of the factors for each of the four samples suggest that where school adjustment problems are present, they may be related to psychological problems within the family in one case, and economic and social problems in another or they are combined as multiple causative factors. A term commonly used to describe children with adjustment problems of the first type is that of "emotionally disturbed." School and interpersonal problems related to the second type of factor are currently being referred to as those resulting from cultural deprivation or cultural disadvantage. Thus the terms "emotional disturbance" and "cultural deprivation" are ones which seem most appropriate to these specific patterns.

One point which is worthy of mention in relation to these two factors is the presence of occupational status or negative ratings of the social environment in the factor which is called "school maladjustment with emotional and social disturbance." A review of the cases in which this constellation of variables occurred suggests that the social workers' judgments of the family's ability to produce a wholesome environment for the child was related somewhat to the intelligence of the parent. The intelligence of the parent is here inferred to relate to occupational status of the father as well as to the ability of the mother and/or father to discuss the problems of the child. In other words, where the family was of higher occupational status, and educated to the point of being verbally facile in discussing the forces at work in the life of the child in question, that family would receive a lower (more positive) rating indicating greater adequacy as parents than a parent would receive from a lower occupational level who was not as sophisticated. The sophistication of parent in her understanding of the child's problems was probably given a positive weight by the social worker. Such a parent would be perceived as one with better coping powers. Also there is no doubt but what a parent who is able to understand and use the jargon of child development and personality theorists makes a better impression and would be judged to be more adequate. The problems of the child remain just as severe whether the parent is sophisticated or less well enlightened.

Two judgments are needed. One evaluating the family's relationship to the child and the other the ability of the family to cope with problems.

A third factor was common to all samples also. This contained the objective ratings of the neighborhood, house, source of income and occupational status. The loading of the variables is somewhat different in each sample, but such differences may be attributed to random types of variation. "Socio-economic status" is the name given to this factor when it occurs.

The fourth factor in the sample of 2nd grade boys and factor five for 5th grade girls contains variables rating problems in either the family or the social environment; however, no indices of adjustment difficulties are present in the factor. In both samples the interpretation which seems most applicable is one of problems in adult-child relationships or social problems, both without adjustment implications.

The fourth factor in the sample of 2nd grade girls is one of social conflict. The variables are norm conflict, social mobility and the social worker interpretation that these factors are related to adjustment problems suggest that this pattern of variables represents more malignant forces and a greater degree of vulnerability or larger number of adjustment problems than the pattern of variables in factor four for 2nd grade boys and factor five for 5th grade girls.

Social problems without adjustment difficulties is the best interpretation which can be offered for the fourth factor in the sample of 5th grade boys. Peer problems and economic deprivation are present, but norm conflict and evidence of school problems are absent. This pattern suggests social and economic disturbances which are not related to school adjustment difficulties.

Factor four in the sample of 5th grade girls contains ratings of school learning problems and of physical difficulties. A negative loading on the qualitative judgment requiring the social worker to rate the presence or absence of overall physical problems contradicts the positive loading on the judgment that physical conditions were present. As mentioned previously, the social workers faced a real problem when asked to evaluate the physical or health status of the children. Only a few children are found to have really poor health in any school sample. There are the usual colds, childhood illnesses and eating preferences, but often nothing which appears worthy of note. Health, physical status and robustness are no doubt related to the child's ability to attend to and participate in classroom activities. Even though ratings of either poor or good health are the easiest to make, one can expect that physical status can be judged on a continuum. The problem remains for developing appropriate criteria for ratings at different points in such a continuum. The variables in factor four for 5th grade girls suggest that while physical problems are noted by the social worker and listed in their summary evaluation, they are ignored (at least in some cases) when making the overall evaluation of the health status of the child. A review of the actual social worker interview indicates that where emotional problems were noted as present which has a potential relationship to somatic difficulties, this fact confused the ratings of physical status. There is a need to develop a systematic procedure for inquiry into the health status of children with appropriate criteria so that ratings of health status can be less contaminated with other factors.

ANALYSIS OF THE DATA COLLECTED BY THE PSYCHOLOGIST

A. Individual psychological testing in the schools

An initial visit to the school in which testing is to be done is essential. The school secretary, an harassed female who is responsible for almost every facet of school procedure, can provide the visiting psychologist with a schedule of the school day and pertinent holidays. Recesses and lunch periods differ from one school to another and from one class to another. Planning with this in mind will save unnecessary interruptions. Also there are specific programs to be kept in mind: fire drills may empty the building for 20 minutes. Group testing programs may interrupt the individual test schedule. Programs in the classroom or the auditorium may require the presence of a pupil. These situations are often known ahead of time. However, if the visiting psychologist's role is understood and accepted by school personnel, the teacher will feel free to inform the psychologist by note that a child is not available, saving misunderstandings.

Such simple problems of procedure as the coffee break and lunch, are best learned in advance, as are smoking rules. When extended time is spent in the school, the visiting psychologist may need to make his contribution to the coffee fund, or bring his share of coffee cake. Occasionally, this is handled by daily contributions. Scrupulous attention to these details spares the development of resentment and misunderstanding.

The schedules of school personnel are another area to keep in mind. It is not practical to expect the school secretary to take time at the beginning of the school day, for example on a Monday morning, when absence slips are being checked and temperatures are to be taken to arrange room space, and to call a child. On certain days, such personnel as the visiting nurse, the art instructor, or the music teacher, may require the room available for the visiting psychologist. It is probably generally impossible for school personnel to produce on demand all the requirements of testing: a small quiet room with proper size tables and chairs and adequate light. Bringing the usual "Testing" sign (quiet, testing in progress, do not enter), is one aid but when testing occurs in the Library Room or the Mimeographing Room, it is often naive to expect school personnel to follow such instructions when material must be obtained.

In this study some of the following rooms were used:

Nurses' Office (occasionally ideal, but it contained the emergency phone and essential calls were sometimes made in the middle of testing.

Cafeteria (overly large, and chaotic before lunch).

Mimeograph Room (deadlines for material overrode the needs of the examiner).

Library (children sent to pick up material did not know how to reconcile the requirements of the teacher and a strange sign at the same time).

Storeroom (anyone could burst in at any time).

Teacher's Room (schedules had to be observed here scrupulously, and the coffee-making aide came in unexpectedly some 20 minutes before breaks).

Principal's Office (an unusual imposition, possible only in small schools with half time principals).

Auditorium (PTA ladies were not prepared for visiting psychologists).

Empty Classroom (considered available to anyone).

Music Room (one of the many rooms overloaded with stimuli to distract the child).

B. Test procedures

The test day began shortly after the start of school so that attendance records could be compiled. A free room was assigned, the examiner put up his "Testing in Progress" sign, often on two doors, and arranged his test tables and chairs. When both older and younger children were to be seen, two sizes of tables were helpful. Most examiners relinquished the use of a small matching chair and an assumed "equalitarian" level with the child, finding the adult size chair much less fatiguing by the end of the day.

The child to be tested was summoned by the secretary, who sent a notice to the classroom reminding the teacher of the purpose of testing and an estimate of the time involved. At this point, the teacher could notify the examiner of any difficulties such as a special program or group testing, so that another youngster could be seen instead.

From the office, the examiner and child went to the examining room. In the process, the examiner asked the child if he knew why the examiner was there and clarified misunderstandings with some variation of the following: "We are seeing a number of children in your school and using some tests to find some things about you, like what you know and think about. Some of the questions are very easy, and they get harder, so no one could know them all. But you do the very best you can."

Upon being seated in the examining room the test proper began, with a clarification of the child's name and age. (It was not unusual for the teacher to send the wrong child to the office, and only at this point for the child to inform the examiner that the expected youngster was not in school that day.) Running notes were taken continuously from the moment the examiner and child were seated at the test table. These notes added color to the test findings and were an essential part of the final interpretative process. The child's name and his reported birthday were recorded. By grade five it was unusual and significant for a child not to know his birthdate, usually relating to a low mental age or outstanding disruption of general functioning. However, a gratuitous flow of information as to birthdays and celebrations was also unusual at this level, and all of this was recorded. (This seemed to relate to poorly integrated control, and the examiner speculated that such initial outbursts of unrequested information would be paralleled in the classroom where the child would not answer the presented question without excess chatter.)

At grade two, the birthday question was much more discriminating, since at this age a large number of children did not know their birthdays (certainly this related closely to mental age) and many felt this question to be an invitation to discuss the party situation. A later verification of birthdates allowed the examiner to clarify the meaningfulness of the child's response. For example, if the birthday was in the immediate vicinity of the test date, a certain preoccupation was much more likely and lacking in significance.

At this same initial point, the examiner tried to record a note as to the child's initial appearance and demeanor. Such points as physical build and size, attractiveness, grooming, initial mood and warmth, were informative here. A comparison of these initial notes with later impressions gave valuable information. For example, initial shyness and silence could be contrasted with growing freedom of expression, a combination which was generally a sign of good adjustment, particularly at the younger age. On the other hand, some initially well controlled children became progressively less oriented toward the task at hand, standing up or even leaving the table, suggesting a serious loss of control. The point at which this occurred could be a significant clue as to problem areas.

1. WISC

Testing began with a brief measure of intelligence, consisting of three verbal subtests (Information, Comprehension and Similarities) and two performance subtests

(Picture Completion, Block Design) of the WISC. This battery was selected as a reasonably reliable measure of intelligence using subtests which were most likely to provide behavior from which personality inferences could be made. The first questions were the Information (I) items. Information is an excellent subtest with which to begin on several counts. For one, it is the first administered of the WISC subtests and the standardization is based on its use as the first section of the test. Second, there are an unusually good spread of items, so that at any age level, a school child will have some successes behind him before he meets the more difficult items. From the examiner's knowledge of the number of items typically known at each age level (8 at age $7\frac{1}{2}$; 13 at age $10\frac{1}{2}$), a quick impression of intellectual functioning is gained within minutes. Also, this subtest gives rise to a flood of associations in the less controlled child, especially the younger one. Recording these associations on the side of the test blank left the examiner with rich information about the child's world: from what store do we get sugar? "I don't know. My mother never lets me go anywhere. My brother gets to go, but I have to stay home with the baby." (The same flood of information is likely to be given in the classroom.) Another initial impression was from the questioning necessary to obtain a response from the child. Some children found the initial questions somewhat threatening, and fell back on a flat "I don't know." The degree of encouragement necessary to elicit a response could be noted by adding a "Q" for each question repetition or coaxing persuasion by the examiner. Later examination of certain children's records revealed strings of four or five questions at a time needed to elicit initial responses. (Such children may be inferred to be equally resistant to teacher's entreaties and require undue personal attention in a classroom.) Another implication of this kind of response was a need for obsessive accuracy. Children were urged to guess, if they could not respond to initial questions. The degree of flexibility could be estimated by their freedom to speculate. It was also worth asking for a second guess when a child gave an unusual response, in order to see the availability of commonly accessible information to the child. Asking the child why he responded as he did could provide a great deal of information about his thinking process.

On the basis of the first subtest of the WISC, then, the examiner had a number of hypotheses established within the initial few minutes of testing. First was the initial impression of the child: slovenly, well groomed; fussily dressed; unusually short or tall or fat or thin for age; some special facial features; a pretty girl or handsome boy; a charming approach to adults; shyness or boldness(the former was more appropriate); undue apprehension; socio-economic factors immediately noticable and their relationship to the school which the child attends (the only Japanese child in school). These factors had to be recorded at once, their ability to slip from memory after a day of testing was uncanny. The child's response to the simple question as to his birthday, and to the WISC Information questions, immediately set the testing stage as harmonious with the school setting and established the examiner as a "school-type" person. Inferences from the child's behavior at this point were likely to parallel those recorded by his teachers: school-oriented or school-resistant; a thinker or a doer; an achiever or a non-achiever; a mature, independent little student, or an infantile, teacher-dependent child.

The WISC continued with the second subtest, Comprehension (C). This subtest is not as adequate a measure of general intelligence as are the other verbal subtests used in this study. Factorial studies indicate Comprehension is less reliable (Cohen,) (that is, failures and successes occur by chance) because of the elicited factor of "the application of judgment to situations following some implicit verbal manipulation," found by Cohen at the earlier ages, or "verbally retained knowledge impressed by formal education," more apparent at the later age. Comprehension is a measure of judgment only when the child has not yet been taught "what to do" in most situations, and must reason out a response. Thus, an older child readily parrots that he must not hit anyone smaller than himself, but a younger child reveals his orientation toward life ("beat them up;" "let them hit you, they're the baby"). Moreover, this subtest is composed of a variety of emotionally loaded questions, especially for younger children. From the initial "What to do when you cut your finger?" which elicits preoccupation with injury or not obeying (playing with forbidden sharp objects) the themes of aggression and quilt can be overwhelming. The second item regarding the loss of a friend's toy is another guilt producing theme. Others are being sent to the store, with the possibility of losing or pocketing change, or going out of bounds to go to another store, fighting with younger children or seeing a train approaching a broken track where some children insist they would not have caused this. A passive response is often adopted by younger children (asking mother to handle each situation). This behavior is a standard reason for low scores at the younger ages. Thus, while Comprehension proves to be a poor estimate of intelligence when the dependency role predominates, the information gained as to the child's typical behavior can be valuable. Also, a tendency toward aggressive behavior or guilt ridden behavior can be seen. The ability of the child to stick to the question and avoid being distracted by aggressive, guilty, or dependent preoccupations is a good measure of his ability to cope with life experiences.

The third measure of verbal intelligence used was the fourth subtest of the WISC, or Similarities (S). This subtest has a rather poor range of successes and failures at an earlier age, and reflects actual learning. Only at a later age does the true measure of abstraction take precedence (Cohen, 1959). This subtest gave a good estimate of the ability to adopt a set. For the younger children, the sudden use of the "alike" set (peach and plum) was difficult to comprehend. Urging the child to answer even if only a guess, and if necessary giving the proper response, as required by the Manual, allows the examiner to see how readily the child can change his approach when a former one is ineffective.

Two performance subtests were used in the brief test battery. The first, Picture Completion (PC) has a wide range and allows a child the experience of success before reaching the more difficult items. It gives an estimate of attention and of perceptual acuity. The second performance subtest was Block Design (BD). This subtest did not have too good a range at the lower age (even a zero score is given a weighted score bonus), but paired fairly well with Picture Completion, in that perceptual difficulties on one test could be compared with those on the other. Work style could be assessed on this task: perseveration and endurance, planning and foresight, efficiency and the like.

In reviewing findings, a scatter analysis did not prove to be discriminating, for some of the reasons mentioned above. However, the meaningful personal information gain in observing the child's approach to WISC tasks was useful in predicting school problems. A very important variable was the over-all score: the higher the intellectual level, the more likely the child was to be among the better adjusted children in the sample.

2. Rorschach

After the WISC, which typically took 15 minutes to administer, the Rorschach was given, following the standard Klopfer (1959) instructions.

"Did you ever make pictures by dropping paint on to paper and then folding it over to make a design? I will show you some pictures made like that, and I want you to tell me what it looks like to you, what it makes you think of. They aren't anything really, but they should make you think of something." An inquiry followed the initial presentation to clarify problems of scoring. The questions suggested by Baughman (1958) were frequently used to simplify the inquiry. However, especially at the younger age level, the inquiry could be an ordeal, and scoring was often arbitrary.

The Rorschach was a change for the child. From the right-and-wrong requirements of the WISC, suddenly there was no leads or rules to go by. Some children rose to this as a challenge, others found it a relief, while still others were upset not to have rules to utilize. The different reactions were noted, and further impressions listed. These were compared to the initial notes, thus serving as a check on the child's adjustment as he became acquainted with the test situation.

The Rorschach took about 20 minutes, depending upon the productivity of the child, and more important, his ability to verbalize the basis for his responses.

3. Bender

The test battery ended with the administration of the Bender. The child was given one sheet of paper and a pencil with an eraser. He was told: "Here are some designs I want you to copy. I'll show them to you one at a time. Copy them as well as you can." The examiner made notes as each design was copied. In this way, paper and card notations could be recorded. Also, a final impression of general test behavior could be noted as the child drew the designs. After the last drawing, the child was asked to write his name on the page, and informed that the examination was completed, so that he could return to class.

Often, the child could be given a note requesting the next child on the schedule to be sent to the examining room. In other cases, the examiner returned to the office where the secretary could call for the next child.

Sometimes testing, which could be completed typically in 45 minutes, had to be interrupted for recesses or lunch. Quite frequently the child returned long before the break was over, in his eagerness to continue.

C. Test scoring criteria

Upon completion of the examination, each psychologist recorded his test findings and specific impressions on the testing schedule.

1. The first measure recorded was the WISC. The results of the five subjects were entered, both raw scores and weighted (scaled) scores following procedures in the *Manual* (Wechsler, 1950), estimated verbal performance IQ, the discrepancy between the two scores, and an estimated full scale IQ were listed. Since three verbal tests were used, these were prorated to the expected five, and the IQ was entered from the table in the *Manual*. The same procedure was utilized for the performance subtests, here prorating two subtests to five.

2. The Bender was evaluated for the following design errors. Each reproduction was scored in terms of the presence or absence of the error, and then the total number of errors of each type was noted.

Design errors	Criteria
a. Modification of Figure Size	This deivation includes the increase or decrease in linear size of the figures compared with that of standard stimuli. Size of figure in normal records may be expected to fluctuate within the limits of an increase or decrease of $\frac{1}{4}$ of the length or width of the standard stimuli.
(1.) Decreased figure size	Number of drawings with either vertical or horizontal axes decreased $\frac{1}{4}$ in size (total possible score 9).
(2.) Increased figure size	Number of drawings with either vertical or horizontal axes increased $\frac{1}{4}$ in size (total possible score 9).
b. Modification of Gestalt	The drawing in which the deviation occurred is noted and then the total number of devia-

tions in each of the following scoring categories is recorded. (total of all scores in the section 51).

(1.) Deviations in closure	Closure refers to the reproduction without overlap of the connected contour of the whole figure or any subpart. Included also is the joining of subparts. Difficulty in closure may result in the following deviations: break in contour; runover at the point of juncture; separation of subparts; penetration of one subpart by another; displacement of one subpart; and absorption by one subpart of the apex of another (total possible score 9).
(2.) Regression	Regression or lack of maturation is the use of less mature concepts in figure reproductions. The following deviations must be present in three or more units of the figure to be so classified: 1. Circles, dashes, commas or scribble for dots or loops (Figs. 1, 2, 3, 5 and 6). 2. Dots for loops (Fig 2). 3. Arcs instead of clear cut angles (Fig. 3). (total possible score 5).
(3.) Rotation	Revolving of the total figure on its axis in either direction such that the angle subtended between the figure's horizontal axis and horizontal edge of the paper is more than 15° greater than that in the standard stimulus figures (total possible score 9).
(4.) Changes in curvature	Possible modifications include pointing curved subparts (Figs. A, 4, 5, 6); flattening curved subparts (Figs. A, 4, 5, 6); scalloping or uneven amplitude (Fig. 6). (total possible score 4).
(5.) Change in angulation	Involves a change of greater than 15° in the size of any angle in the subparts of a figure or the angle of intersection (total possible score 9).
(6.) Incorrect number of units	Refers to perseveration or truncation of Figs. 1, 2, 3, 5, 6 by increase or decrease in the number of units as compared to the stimulus. The general Gestalt may be accurately reproduced, but the number of units comprising the whole is incorrect. An error of two or more units is necessary in order to consider the figure deviant in this respect.
(a.) Perseveration	Increase of 2 or more units.

(b.)	Truncation	Decrease of 2 or more units. (Total possible score 5)

Bender drawings were also scored for organization including orderly, random or rigid placement of the drawings; page arrangement, whether close to side, top or bottom; and work methods. These latter scoring categories were omitted from the statistical analysis of the clinical procedures either because earlier research (Lambert, 1963) had shown them to be of little predictive value, or because their infrequent occurrence made their use in correlational studies unfeasible.

3. The Rorschach was scored according to the Klopfer scoring procedures (1954), (1959) In general the location, the determinant and the content initially were scored for each response. Additional responses were noted, but not included in the final list of responses which were used in the factor analyses. The time for the first response to each card was recorded, the total time for the Rorschach administration, the total number of responses and the number of card rejections were also noted. Popular responses were listed. Any unusual behavior toward the Rorschach administration was noted on the protocol, and used in observational judgments of the child's test behavior. Following a review of the scoring categories, the comparison of distribution of each score led to omitting the content categories from the factor analysis of the psychological test data in order to minimize the number of variables in the analysis.

The specific Rorschach scores which were recorded following the criteria suggested by Klopfer were as follows.

Location:
Whole card responses (W)
Large detail of card responses (D)
Small card detail (d)
Unusual detail (Dd) and use of white space (S)

Determinants:
Human movement (M)
Animal movement (FM)
Inaminate movement (m) was present in so few records, it was omitted.
Form - color (FC)
Color - form (CF)
Form only (F)
Form only, but poor or vague quality (F-)

Other:
Popular response (P)
Number of rejections - number of cards for which no responses were given.

D. Psychologist's test observations and criteria

The interview procedure required the psychologist to code a number of clinical impressions as absent, present, or present to a marked degree. These clinical observations were based on a check list developed by Glasser and Zimmerman ( ), using the following rationale:

1. Attitude toward the examiner

a. Shyness. Shyness can be observed in the child's holding back from responding to the examiner, even after a period of getting acquainted. A certain degree of reserve, expecially in the initial period of contact, is a normal sign in school-age children, and, in fact, should be expected as an indication of good adjustment. However, when this persists to the point of limiting responses, problems are indicated. Is the examiner seen as a threatening adult? By analogy, does this suggest a tendency to see adults (parents, teacher) as frightening or demanding? In the classroom such a child will presumably need constant attention and urging to respond. In rare cases extreme shyness represents a severe withdrawal, indicating that the child is no longer in contact with those around him; in these instances other behavioral signs of disturbance are prominent.

b. Brashness. The child's approach to the examining situation and the examiner may be brash or even aggressive, with behavior directed against the material, the examiner, or both. Grabbing material, bending or drawing on the cards, tossing things roughly on the table, all suggest notable uncontrolled behavior which can be expected to carry over into other settings as well. Impertinent questioning of the examiner ("You tell me the answer!"), refusal to remain seated during the test, answering back, and other such inappropriate reactions indicate an inability to restrain behavior, and a tendency to act out negative feelings. This sort of behavior in the classroom can lead to rejection of the child by others, which in turn serves as a further impetus to retaliatory acting out on his part. Differentiating between reactions directed toward the examiner or material can be helpful in determining the way in which the child directs his aggressive feelings. Aggression directed against the self may also be noted.

c. Dependency. A role frequently reflecting simple immaturity or retardation, but often indicating emotional problems as well, is that of great dependency on the examiner. The child calls out for constant reassurance, or presents each response hesitantly or interrogatively, waiting for approval before daring to continue. This presents a sharp contrast to the self-reliant and independent behavior expected at different age levels. An important clue to dependency is the degree of active participation in the examination, such as returning material to the box independently, or at the examiner's example or suggestion. A lack of initiative in this direction, after the examination is under way, suggests passivity, immaturity, and possible anxiety relating to authority figures (doing nothing to avoid doing something wrong). Dependency can be a factor to consider in selecting the best teacher for a specific child.

d. Defensiveness. Another valuable clue in attitudes toward learning is a characteristic attitude of defensiveness elicited by the test situation. That is, the child may reveal an on-guard, apprehensive, expecting-the-worst pattern of behavior ("You didn't give me enough pieces!"), as compared to an attitude of relaxation and spontaneity. Such a reaction is antagonistic to ready acceptance of instruction, and can be an important clue to classroom reaction.

2. Attitudes toward the test and test materials

a. Impulsivity. An overly impulsive approach to material may be revealed by the child's blurting out responses without due consideration, or manipulating objects with no prior consideration of their meaning. This is characteristic of the very young child; in children 7 years and older, it may indicate immaturity or regression. Impulsivity may also indicate a deliberate avoidance of preliminary reflection, perhaps because such delay would allow the child to become aware of feelings which are highly anxiety-arousing. Impulsive behavior is often interpreted as revealing emotional attitudes which ideally should be suppressed; for example, on WISC Comprehension Item 4: "Beat up on 'em!" or "Run home to Mommy," are inappropriate responses for school age children. Another very significant feature is the child's inability to remain seated during testing.

b. Giving up. When the child gives up the struggle to succeed, using a flat "I don't know" and rejecting even easy problems as "too hard," significant problems in learning are indicated. It may mean the low level of aspiration so typical of the non-achiever, or it may reveal the child's real uncertainty and doubt of his own abilities. Specific neurological difficulties sometime make it difficult for a child to judge his own skills accurately, especially when his abilities tend to be erratic. A child with such a problem often simply gives up rather than risk failure in areas he has never explored. Somewhat the same defensive behavior is seen in a child who tends toward a passive-aggressive role. (Incidentally, the acceptance of the "giving up" by examiner or teacher confirms to such a child the environment's acknowledgment of his supposed inability.) A background of impatient parents and teachers who expect the right answer at once may have led the child to develop a "give up" philosophy in order to escape unrealistic pressure. Another aspect of this is seen in a child's tendency to blame others for his difficulties. ("You didn't give me enough pieces, it can't be done.") Further, this may reflect a more basic passivity which makes learning difficult; here the child is not impelled to take in or grasp knowledge.

c. Persistence. The reverse of the above behavior can be found in the child's persisting attempts to solve problems. The persistence may be organized and realistic, or blind and perseverative. For instance, several throughtful alternatives might be explored on Block Design. By contrast, on Object Assembly, a child may persist in unadaptive attempts to fit parts where they do not belong.

Some children insist on attempting problems beyond their ability in a somewhat driven manner. The willingness to acknowledge one's limitations can be of great importance in the classroom, which requires the acceptance of a state of ignorance in order to acquire learning. When a child is unable to admit that he does not know how to do something and needs help in acquiring the proper skills, he is unable to learn. Persistence can also be a clue to the ability of a youngster to organize activities within the time limits which are culturally imposed. The significance of such behavior in the classroom is readily evident.

d. Reactions to success and failure. It is important to observe the child's reaction to his work, or to success and failure. Some children cannot accept the examiner's praise or approval, becoming uncomfortable, and driving themselves to further effort. Thus, success is discounted as unimportant, the items are "too easy." The child's inability to accept his own skills suggests a driving conscience (or parent), taking the enjoyment out of learning by constantly raising the level of aspiration, giving the child no chance to rest on his laurels. An over-zealous drive for achievement often arises from this setting, reflecting itself in chronic dissatisfaction with performance.

The child's reaction to failures can give important clues to his self-concept. Thus, do his failures on one subtest transfer to his performance on other subtests; will one failure precipitate another? If so, an extremely fragile self-concept is suggested; any difficulty is used by the child to prove how inadequate he is. The effectiveness of praise and support for such an individual, and the point at which they are needed and are successful, allows important inferences as to the role of the teacher in encouraging the child's success. This area also gives a lead as to the child's frustration tolerance. Proper evaluation and acceptance of failures by the child should allow him to resume directed effort on the next subtest, thus not penalizing himself unduly through guilt.

e. Attention and concentration. Attention is an important variable measured by the WISC, both in its formal aspects by the subtests (see Digit Span), and in general test behavior. Is attention adequate, or does it wander readily? Irrelevant material introjected into the examination may indicate the child's vulnerability to any stimuli and inability to screen out unrelated material. Giving up can indicate the inability to sustain attention until success is reached. Not only the extent of attention span, but also its timing and the areas where it is most vulnerable should be noted. Presumably such areas are those which are the most anxiety provoking.

Mild wandering can, of course, highlight an organic as well as a neurotic problem. Does attention flag as testing continues? This is often a subtle sign of a neurological deficit; it may also measure low frustration tolerance triggered for other reasons. Specific areas which disrupt the attention span may be those calling for abstract thinking, for perception, or for manipulation of objects. Particular questions or tasks, perhaps involving guilt, aggression, or other affective stimuli (particularly in Comprehension and Picture Arrangement) also often create problems in attention.

In order to achieve results, concentration is necessary once the child is able to attend to material. Differentiating between the two factors is of importance, since problems in attention are of less significance when concentration is not disturbed.

f. Personal reference. When test material persistently elicits some reference to the child's own life and activities, pressing problems are implied. (Comprehension I: Cut your finger. "Go to hospital. I went to the hospital for my tonsils.") This suggests an inappropriate degree of self-centeredness typically seen in an immature personality or a child who is unable to act in an age-adequate manner. Personal reference can be brought out in two ways: first, a pervasive flooding of personal material throughout the test; and second, an unwarranted insertion of personal material in a specific area, suggesting that disturbances are limited to this aspect alone. Comprehension items may trigger such responses by their hostile or guilt-arousing nature. An entire subtest which is handled with great difficulty may also illustrate the same problem. The pre-examination period of establishing rapport is important in ascertaining the child's present realistic concerns. For example, just before being examined, a child has seen a youngster badly cut in a fall on the playground. He showed his immediate preoccupation with this incident in the initial conversation, and again on the Comprehension I item. No other references of a personal nature occurred, and the child was correctly classified as well adjusted.

g. Blocking. When the child blocks in his responses, with "I don't know" a frequent answer even at the simplest level, the unwillingness to hazard an answer may indicate such alternatives as a perfectionistic self standard, little interest, or lack of emotional energy for use in intellectual tasks. In the latter case, repression has played too great a part in personality development. To clarify which personality variable is affected here, praise and encouragement are of importance. An answer which is readily elicited after encouragement has not apparently been adversely affected by the repressive process.

E. Psychologist's qualitative judgments and related criteria

1. General procedure for making judgments

After the quantitative material was entered, 11 qualitative judgments were made on a five point scale. While ratings were spread over a somewhat normal distribution from 1 to 5, and differed for grade two and five, the initial basis upon which each rating was considered is listed below.

a. This pupil has poor intellectual functioning. Intellectual functioning was seen as a measure of the child's ability to apply intellectual endowment to school work. Inference about this was made from WISC scores, with particular emphasis on measures of information, judgment, reasoning (I, C, S, BD) and attention (PC), as indicated on special subtests used and by the child's overall reaction. High scores on the WISC would be considered limited by the presence of erratic skills, or inability to keep from being flooded with inappropriate extrania. They could also be balanced by obsessive preoccupation with "facts" which might presumably limit school performance. Brashness, particularly on the WISC, would suggest a negative aspect of intellectual functioning, again, limiting actual achievement. A child whose contact with reality was poor might be unable to recognize or utilize his skills (failing to "guess" when there was considerable evidence that he knew the answer). Another point which lowered ratings even when test scores were high was when it was necessary to pull from the subject each response, indicating an unwillingness to produce without constant urging. Such a child would presumably also fail to produce in the classroom.

b. There is evidence of severe perceptual difficulties. The rating of perceptual problems was based on the Bender performance primarily but with some weight given to the Rorschach. The examiner looked for such negative signs in the child's work as infantile perceptions and executions, overly speedy or careless productions, bizarre qualities, and a lack of foresight or ability to correct as he went on. The difference between the Bender and the Rorschach was checked to see the difference between hand-eye coordination problems and actual perceptual problems. The first influenced the Bender alone, the second was seen in both tests.

c. The Rorschach indicates a pupil with severe personality disturbance. The presence of emotional problems was based predominantly on the Rorschach, with ratings of deviant Benders and observations of general mood added. The initial problem was to differentiate between transient age concerns and actual problems, and between environmental factors which could be overcome and permanent problems.

Infantile perceptions and concerns were given special weight. These included such factors as the absence of human movement responses (M), preoccupation with whole responses (W and WS) which were not clearly seen, lack of adequate color responses (FC, CF), or excess explosive color (CF, C) and the perseveration of primitive responses (for example, "tree" usually seen by much younger children).

Bizarre qualities in the responses were particularly suspect. The investment of energy in odd, unusual ideas suggested a problem. The flooding of ideas, often in the form of precision equivalents (for example, "It looks like a bat-bird-butterfly-moth-flying dragon-robin-sparrow" with no real specification) was assumed to represent a substitution of quantity for quality, and would presumably reflect somewhat similar problems in the classroom.

A lack of communication, or severe blocking, was also explored. The child who could not explain his responses or even delimit them on the blot seemed to have some kind of difficulty.

d. This child has problems relating to classroom teacher. When rating pupils' problems relating to the classroom teacher, the psychologist drew directly on the interaction in the test situation, which was considered a prototype of the teacher-pupil relationship. Therefore, aspects which tended to impress the examiner (looks,grooming, verbal skills, intelligence) were added to the child's reaction to the examiner: cooperative, interested, helpful, and studious. Specific factors which were found worth while rating were brashness and hostility toward the examiner, a lack of cooperation, blocking, and the inability to respond to direct questions. The child rated well here could accept the discipline of the test situation (remain seated, try hard to do well), and also accept support from the examiner without becoming excessively dependent. Thus, at certain stages the examiner would help make a failure more palatable by pointing out that the child had not yet studied that. The well adjusted children accepted this gracefully. The dependent children were quick to use it as an excuse and fail to try.

e. This pupil meets learning tasks effectively. The presence of learning problems was rated with inferences of several kinds: actual level of intelligence, apparent availability of intellectual resources, acceptance of the role of student (as indicated on the previous rating), and evidence of actual learning as, for instance, inferred from the Information subtest.

Thus, a bright child who was relating easily and trying hard on the test material, who had a good fund of general information, and who did not seem to break down under pressure, would be assumed to be one without learning problems. On the other hand, a brash, erratically functioning youngster who tended to resist the teacher would probably express his problems in the failure to learn.

f. This child has creative potential. Evidence of creative ability was a rating without a practical basis or rationale. The assumption was made that it would reflect good intelligence and imagination as indicated on the Rorschach. An interaction between the WISC and Rorschach was relied upon. A bright child who found the lack of structure of the Rorschach threatening might find any aspect of creativity much the same. A dull or disturbed child would presumably lack the energy or ability to be creative. A very bright child might be expected to be more creative than a dull, unimaginative child.

It might be said that this rating was based primarily on the availability of ideas to the child.

g. This pupil has poor school adjustment. Since this study was concerned with identifying the child who had trouble in school, the rating of school adjustment attempted one more facet of the school problem. Here, there was an attempt to detect the child who could behave well in the classroom. The youngster who was unable to settle down to the examination procedures without moving from the table or interrupting with extraneous thoughts would not be able to adjust in the classroom. The child who did not produce anything without coaxing and cajoling would not work in the classroom unless the teacher gave her individual attention. A factor which could only be hypothesized from the test situation was the child's response to a classroom itself. Thus, some children were the soul of cooperation in the individual test session, and effectively concealed their tendency to be distracted or fail to produce when they did not get individual attention. The Rorschach was utilized here to estimate social skills and interest, but this was a difficult rating to make for some children.

h. This child has poor school achievement. A prediction of achievement in class shared some overlap with the "learning problems" item. Initial impressions were based on the intelligence level and the relative success on the Information subtest. Uneven, erratic successes on both the WISC and Rorschach would be assumed to result in uneven school success. This might be in direct opposition to the presence of learning problems, in that a child would not reveal what he could do, but had no difficulty learning. A blocked child might learn but fail to produce in class. A perfectionistic child might never finish an assignment because of the urge to get it "just right." The general approach to test materials, with some emphasis on the Bender, was used to estimate work habits and thus achievement.

i. Overall rating of WISC. For comparison purposes, the psychologists were asked to rate each test individually, even though these ratings were imbedded in the previous list. When the WISC was rated, the examiner compared the child's scores to those of the school as well as to the national norms. High, even scores were contrasted to low or erratic scores. Here it was important to correct for chance variations, the sudden "catching on" to the Kohs Blocks, for instance, which led to a lopsided profile. By the same token, particularly with younger children, a slight and temporary blocking would keep a child from reaching an optimal score on a subject.

j. Overall rating of Rorschach. For an overall rating of Rorschach, the norms of Ames (1952), Ledwith (1959), and Klopfer (1954) for the appropriate age levels were most helpful. This was particularly true when the "good" records were to be rated. In this sample, it was rare for the idealized Rorschach (that is, with a proper number of M, PC, and P, and the like) to occur.

k. Overall rating of Bender Gestalt. In the overall rating of the Bender the work of Clawson (1959) was helpful in establishing norms for the Bender. For this rating, an overall impression of the Bender was relied upon. Very deviant Benders were easy to find, almost all the rest seemed to pile up with a series of minor defects, and the "good" Benders were rare indeed. At grade five the quite adequate hand-eye coordination which was typical of this age meant a smaller range of scores.

2. Criteria for psychologist's qualitative judgment-grade two boys and girls

a. This pupil has poor intellectual functioning. Since a test of intelligence was given, the psychologist had a ready made measure of intellectual functioning in quantitative terms. However, the test score alone was not used for several reasons: it was based on a brief test, and therefore might be unreliable (Glasser and Zimmerman, 1961); the range of intelligence of the sample was not large and differed from school to school; a test score does not represent intelligence but only a standard measure of ability to respond to specific tasks; the child's response to test materials was much too richly informative to discard in favor of a score alone; "functioning level" was taken to mean more than a sterile score. Therefore, to make this rating the psychologist drew on the child's ability to respond to the entire examination, including the Rorschach, where his associations could be tapped. At grade two, ratings reflected the following factors: the evenness of functioning (not based on "scatter" which proved to be too unstable to use as a direct measure at this age), the ability to stay with the task (functioning again), the reflective ability, which sometimes surpassed actual scores but suggested a "thinking" orientation, the interest in intellectual achievement. Also involved were an estimate of the child's ability to work up to his potential, and his willingness to produce without the need for excessive urging.

Rating (1) best or most adequate in this dimension of children seen:
Bright, typically 110 IQ and higher. Relatively little scatter of scores, except what was apparently reflecting chance factors; a relatively free and rich Rorschach record; particularly high verbal scores; speed and accuracy in approach; ability to follow direction readily; persistence in work habits; a self-starter, eager to go; freedom and zest, enjoying the challenge; reflective, thinking things through; absence of emotional problems which would invade this area. Specific characteristics might be the following: bright eyed, quick reacting, views the test as "fun games," indicates a history of success in intellectual tasks and school. Expects to do well, challenged and pleased by own skills.

Rating (2) very bright but with some signs of lopsided application.
Less bright than optimal for this sample; less stable application, a tendency to block, requires urging to perform; less dependable; some kind of interference noted which keeps child from reaching full potential. Specific characteristics might be as follows: bright but dwells on current home problems; quick to "give up" on difficult items, although improves with urging; bright but little striving evident.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension: Average for the school.
Usually 90 to 110 IQ; calm, careful, deliberate in work; some ups and downs but an average is achieved; or an even production, with no "redeeming" flashes of ability. Special characteristics might be as follows: an average youngster who follows instructions and performs at age level; potentially bright but some interference suggesting limitations due to emotional problems; some drifting of attention although readily resumes task.

Rating (4) a low IQ, below 100 typically.
Signs of social deprivation in poor attack on problems and lack of interest; notably erratic in application; emotional problems clearly invade thinking, as noted in personal references; needs excessive urging, still tends to withhold responses. Characteristically, such a child loses track of the question and rambles on about current concerns; appears apprehensive of failure and refuses to try; tries to avoid testing by playing with test material or leaving the table.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension: low IQ, often less than 90.
Erratic functioning; low Information and Comprehension; notably distrac-

table; careless and inattentive; wide scatter; barren Rorschach, poor form level; slow and confused; could not follow simple directions; especially low verbal IQ, unusually uneven application; cannot approach tasks "intellectually;" intellectual functioning constantly invaded by personal concerns. Characteristically such a child was confused and dull, unable to comprehend the tasks involved. One little girl was utterly mute, refusing to answer the most simple questions -- then, apparently at whim, answering well. This need for certainty should be a trial in the class.

b. There is evidence of severe perceptual difficulties. Perceptual ability was measured by the Bender, and to a lesser extent, by the Rorschach and the WISC Picture Completion and Block Design. The combination of tests was helpful when differentiating between immaturity in general and distortion in particular. Also, more than one measure allowed the psychologist to parcel out hand-eye incoordination, as opposed to perceptual defects. A global rating was attempted, utilizing the following rationale.

Rating (1) best or most adequate in this dimension of children seen: maturity of perception for mental age.
Planning ability and foresight; in command, masterful handling of perceptual tasks. Specific Bender signs: neat and orderly, response better than pencil control (i.e., maturation) indicates; planning obvious; orderly or regular sequence, minimal errors; careful yet works with reasonable speed. Other tests: WISC both Block Design and Picture Completion high; Rorschach, good form level. Characteristically the child's work is neat and orderly; improves as he goes along; slow planning ability.

Rating (2) less mature than optimal for this sample.
Neat, some planning, irregular sequence. Specific characteristics: random, irregular, rotates design 3; neat and orderly but doesn't draw well, talks during production; one careless overlap, corrects for this subsequently.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension:
Bender appropriate for age: fairly neat, irregular order, often one clear "error" such as simplication. WISC, Picture Completion and Block Design average. Specific characteristics: Bender is accurate but immature and some tilting. Bender irregular, design A is rotated.

Rating (4) overly speedy or careless.
Excessively rigid, reduced in size; confused placement; lack of planning or foresight; does not correct for original errors, such as poor placement. Specific characteristics: designs tilted, overlaps, poor execution; designs drift, design 4 rotations.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension: notably immature.
Distortions; no planning, confused, extreme developmental lag; inappropriate or bizarre quality to drawing; WISC, Block Design low; Rorschach poor form level. Characteristics: almost no motor coordination, overlaps, expands, etc.

c. The Rorschach indicates a pupil with severe personality disturbance. The rating of personality factors relied on the interaction with the examiner, the response to the Rorschach, and the general approach to the examination. Transient age concerns are particularly impressive at this age level, and it was necessary to discriminate between the egocentricity and anxiety so typical of this age and the more serious pathology such as deep seated emotional problems or seriously lagging development.

At this age, the Ames (1952) norms were useful for central ratings, but positive ratings were quite difficult to rate. The clear absence of any "pathological signs," or the presence of "favorable signs" (M, FC, P, F+) proved to be a rarity, with at best some "flat" records with no more than the popular or semi-popular concepts. Therefore, no scoring variables proved definitive, and the overall protocol was evaluated.

Rating (1) best or most adequate in this dimension of children seen.
Good M, stable form level, positive color, F+, P; productive, fairly high number of R; imaginative concepts predominate; clear perceptions especially with original bent; absence of peculiar content; lively, cheerful, imaginative concepts predominate; defenses are randomly applied with good recovery, rather than focalized rigidly; recovers from transient disturbances; delightful thoughts; creative, free, calm, sparkling. Specific characteristics: cheerful M and FM, no color verbalized, original, witty responses.

Rating (2) many of the above signs but with more areas open to difficulty, and recovery not as smooth.
Specific characteristics: lively, good responses, M, FM, P, F+, CF, but had to be urged, very hesitant.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Typical age signs, including stereotyped responses, occasional concept perseverations, occasional lapses in functioning; some weak points, poorly defended; or more organized defences, such as perfectionistic tendencies; average form level; reasonably calm; inspired thoughts; some anxiety, but can recover. Specific characteristics: some brilliant responses coupled with negative ones; good responses combined with FM and some perseveration; excessive FM is seen as frustration in spite of good signs.

Rating (4) serious lapses in functioning, but recovery occurs.
Considerable lag in development and immaturity are noted. Specific characteristics: perseverates simple responses (butter-fly), uses precision alternatives; a flooding of responses, many with poor form level; thinking through percepts in very confused manner, minus responses pile up, particularly on simple cards.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Peculiar content, very poor form level, disturbed color reaction; absence of M, or FM, perseveration pronounced; low P, excessive number of poor original responses; pathological anatomical content; severely limited content; infantile preoccupations; distorted ideas; participates excessively in own recriminative world; erratic, bizarre qualities; severe blockage, lack of communication; inflexibility; inability to integrate or express ideas; perseverates disturbing ideas. Specific characteristics: utter lack of control, random naming of parts; only two P's, perseverates "design."

d. This child has problems relating to classroom teacher. This rating was strongly influenced by the quality of the child's interaction with the examiner. It also was combined with measured intellectual and personality factors. Thus, it was assumed that a bright child would be more likely to adapt to classroom requirements since his ready successes in class would be reinforcing. Also, a "personable" child would adjust well to the teacher. Personality factors actually took precedence over intelligence in the ratings.

Rating (1) best or most adequate in this dimension of cases seen. Intelligent, independent, a self-starter; appealing manner, good grooming; reflective; shy, polite, adult-oriented (assumes responsibility even without verbalized instructions); accepts test situation; cooperative, tries to please adults, answers questions readily; controlled yet spontaneous; relaxed with examiner; a degree of passivity; successful accomplishment; persistent, even if slow; verbal. Characteristics: initiative, helpful.

Rating (2) effective intelligence may compensate for some emotional problems. A charming personality may compensate for lesser intelligence. Specific characteristics: only average ability but tries so hard, mild dependency; good impression but blocks at times, could underachieve; lively, cooperative, signs of recent illness hold her down.

Rating (3) average, typical, at median level or in-between best and poorest of cases seen. The typical 7 year old; behaves adequately in classroom, may need encouragement, or work rather slowly; calm, quiet in class; responds to slight urging with positive action; wants to be accepted and works for it. Specific characteristics: excessively reserved; slow to pick up clues to cooperate with examiner, mild blocking; nice, bright, but something of a perfectionist; a bit nervous and slow.

Rating (4) signs of behavior which impair classroom efficiency to some extent. Need for teacher intervention; attention difficulties, minimal controls, tends to act out; intellectual limitations. Specific characteristics: painfully shy, needs much urging, won't take a chance; vocalizes excessively, erratic; won't warm up, attends excessively to hall outside, have to "pull teeth" to get an answer.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension. Serious disturbances in behavior, particularly in response to authority; brash and rude to examiner; mind wanders continuously, cannot stay in his seat; uncontrolled, stands, sings, grabs material; conversation bristles with non-sequiters; cannot request help appropriately, unusually dependent or rejecting; uncomfortable in test situations, shy, overdependent, withdrawn, hyperactive, resents testing, not comfortable; needs constant approval; rationalizes to extremes; unpleasant, unattractive, manneristic; pushy or poor control; extreme test discrepancies. Specific characteristics: flood of personal reference, stands, sings, grabs material; "curses," starts to draw Bender before given cards!; excitable, had to be led to see the examiner by older girl - lost in hall.

e. This pupil meets learning tasks effectively. These ratings covered the interaction between the level of intelligence, primarily assessed by the brief WISC, and the effectiveness of its application. A separate analysis of the Information subtest, which draws on general learning, sometimes proved helpful. The adequacy of behavior during the WISC could be utilized as clues.

Rating (1) best or most adequate in this dimension of cases seen.
Attitude toward intellectual tasks is "scholastic;" enjoys own achievement; relatively even performance; bright, productive; Information score above own average on WISC; high WISC, 110 plus; creative, productive Rorschach; able to focus attention; cooperative, eager, no excessive anxiety; good reaction time, accuracy; asks relevant questions; not constricted, no personality warping; stable; tests even better than general appearance indicates. Specific characteristics: underlying reserve of ability - high Similarities subtest score, reflective; amazingly bright, fantastic fund of general knowledge.

Rating (2) less oriented toward achievement for its own sake.
More variable in functioning. Specific characteristics: somewhat spotty, but a fountain of "facts" can be pulled from her; does thing his own way, bright but less impressive Information score; bright, nervous and slow; bright, is obviously learning well, but occasional invasion of emotional problems.

Rating (3) average, typical, at median level or in-between best and poorest of cases seen.
Average in problem solving; sometimes hesitant, lacking in intellectual aggression; IQ 90-110; cooperative, needs careful instruction but follows well; asks questions if not clear. Specific characteristics: fairly bright, very personable, but on and off signs of control failure; adds extraneous but "reasonable" material suggesting mild control failures, coupled with a good looking appearance; slow, methodical, no more than average achievement.

Rating (4) frequent ineffective use of intelligence.
Dull, socially deprived; erratic skills, performance ability surpasses verbal skills by far. Specific characteristics: low Information, not impressive; slow, immature, not learning; utterly erratic, much too concrete in thinking.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Unresponsive, must "pull" everything from him, a nonachiever; acts out, avoiding intellectual tasks; failure to respond or concentrate, plays with material rather than work; lethargic approach to intellectual tasks; odd and bizarre behavior; extremely low Information score, is not learning expected material for age; erratic functioning, disorganized, does not follow directions; guesses wildly instead of searching out important aspects of problem; tense, anxious about testing; withdrawn; perseveration, sticky thinking, blocked; test below 90 IQ, discrepancy between WISC and Rorschach. Specific characteristics: low verbal IQ, inability to answer the most simple questions without pouring out personal preoccupations (Q. "What would you do it you lost somebody's doll?" A. "We have so many dolls we don't know what to do with dolls.") extreme blocking, would not even try to answer most items, resulting in a very low IQ.

f. This child has creative potential. Creative potential at grade two was assumed to be a function of intelligence, flexibility, and imagination. Both the WISC and Rorschach were utilized, with the latter being given somewhat more weight. Some of the Rorschach factors which were examined were the originality of percepts, the child's freedom to express himself, and the extent of his productivity. On the standard intelligence test, the child's general knowledge and problem solving ability were also assessed. The combination of these variables made up the rating.

Rating (1) best or most adequate in this dimension of cases seen.
High WISC IQ, especially Comprehension and Similarities, productive responses, rapid problem solving, enjoyment of task; Rorschach: imaginative content, M+, productive, original responses; lively, insightful, bright. Specific characteristics: excellent abstraction ability, unusually creative and can integrate concepts; poor start but has great recuperative ability, his imagination comes through to help him cope; unusually bright with a sudden "catching on" tendency that lets him surge ahead, suggests the sudden outpouring of creativity.

Rating (2) less intelligent but imaginative.
less imaginative or free to respond but quite bright. Specific characteristics: some imaginative aspects but a bit restricted or constricted; bright, imaginative, but a little dependent, therefore productivity would be limited; too imaginative! he lets it get out of hand and is not using it productively as yet, his fantasy runs him; in spite of her lack of control, she is highly imaginative and very productive, some of her ideas are good; a nice boy but too susceptable to frustration to be creative.

Rating (3) average, typical, at median level or in-between best and poorest of cases seen.
Average intelligence and average evidences of imagination and productivity; no particular verve; conventional; popular responses. Specific characteristics: a slightly worrisome boy who has no energy left for creative pursuits; very down to earth and practical, little imagination; very bright but reserved, slow, meditative, everything produced with a questioning tone; ideas are not particularly mature.

Rating (4) less intelligent and/or minimal imagination.
Emotional problems severe enough to impair freedom to "create." Specific characteristics: ideas notably immature and not imaginative; perseverates the same ideas inappropriately, doesn't strive to come up with ideas; will not try, needs urging to do anything, severely blocked; very assertive, insists knows all the answers but his ideas are distorted and infantile; a frustrated, limited girl, no freedom to create.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Rorschach signs: low R, no M, stereotyped, constricted; dull content; WISC low IQ, especially Comprehension and Similarities; constricted, infantile, "pars par toto" thinking, lost in own world; unintelligent, immature, lacking in imagination; unusually rigid, lacks freedom to "roam;" overwhelmed by erratic thoughts; flat, uninspired, unreflective, refuses to guess. Specific characteristics: blocks almost completely, severely lowering IQ, no freedom of thought; quite dull; limits all imaginative processes.

g. This pupil has poor school adjustment. This was taken to indicate the child's ability to adjust in the school room and the school yard. Intellectual factors were considered secondary to personality aspects. Here it was assumed that a child who was "peer oriented" and a successful athlete would be rated ahead of a bright "teacher's pet" who was unable to relate to other children.

Rating (1) best or most adequate in this dimension of cases seen.
Reacts positively to test situation, stable WISC, good Rorschach; free from anxiety, comfortably cooperative, bright; socially "fit," no general personality problems, low anxiety level, bright; controlled, friendly, social, good natured. Specific characteristics: tries hard, impresses examiner with her attempt to do well and please, mature socially; unusually bright and achieving, quietly reserved and polite; initiative, a real little manager, very bright.

Rating (2) might be bright, but "lopsided."
Specific characteristics: bright but a perfectionist, needed urging to produce; might be too bright, quiet, small, a bit too nervous to make adequate social adjustment; quiet reserve, doesn't give to others.

Rating (3) average, typical, at median level or in-between best and poorest of cases seen.
At age in adjustment in all areas, only minor problems, slightly anxious, cooperative, average IQ; cooperative and tries to follow directions, tries to please authority. Specific characteristics: average ability, tends to strain; alert but slow and methodical; much better in performance than verbal areas, some erratic successes; nice, rather slow and a bit immature; a "wiggler," adds extraneous but reasonable material; too apprehensive to rate higher in spite of abilities.

Rating (4) Erratic controls.
Undependable; shy and withdrawn; aggressive, hostile. Specific characteristics: a real tooth puller to get anything, attends excessively to hall outside testing room; floods with free associations of aggression and injury, lacks control; erratic, undependable, can't sit still.

Rating (5) poorest of cases seen indicative of least adequacy in this behavioral dimension.
Impulsive, lacks controls, acts out; overwhelming hostility; very dull; bizarre qualities, doesn't fit in; negative reaction to testing; anxious, disturbed Rorschach; hyperactive; withdrawn; severe anxiety; overactive; inhibited; sticky thinking, possible "organicity;" perseverates ideas; difficulty in comprehension. Specific characteristics: notably brash, rude, uncontrolled, gets "lost" in the hall; refuses to respond, presumably never dares to be wrong; sees no need to meet examiner's requests.

h. This child has poor school achievement. This rating summarized a number of the previous ratings. It was based on intelligence, ability to utilize intelligence, and the absence of overwhelming emotional problems. A direct clue was the child's ability to maintain a high, even level of performance on the WISC, or to show sudden insight, suggesting real problem solving ability. An allowance was also made for personality factors which would enhance achievement as rated by a teacher. An attractive child might relate more readily to the teacher and be encouraged to produce in an interactive manner which would serve to increase his school achievement.

Rating (1) best or most adequate in this dimension of cases seen.
Bright, effective intellectual functioning; adult-oriented; finds school

success self-rewarding; self confident in learning situations; WISC: high IQ, high Information, relatively little scatter, verbal IQ above Performance IQ; quick academic response to instructions; quiet, withdrawn, satisfactions in school work; IQ as potential plus freedom to function effectively; desire to please by conforming; relaxed; relatively stable; serious, but comfortable attack on tests. Specific characteristics: unusually bright, wide range of knowledge, evaluates his own answers; bright, acquisitive of "facts;" very bright, sudden insight on problems, knows "everything;" bright, good recovery and self correction; reserved and studious; bright, enriched background; reflective, appealing, hard working boy, deserves an "E for effort."

Rating (2) less bright or more variability in functioning; might have at least one weak area.
Specific characteristics: either knows or doesn't know, average - plus; bright and learns well but falls back on a dependency orientation at times; bright but a perfectionist so lacks some freedom in achieving; bright but nervous, typical 7 year old concerns; initiative, bright, but a bit less "knowledgable" than usually expected.

Rating (3) average, typical, at median level or in-between best and poorest of cases seen.
Average ability; at this age, responds more to externals (praise, etc.) than to the work itself; average verbal IQ, calm; slow, persistent. Specific characteristics: average IQ, has picked up good information but needs much urging, won't take a chance; more achieving in performance areas but little initiative, slow; average, blocks, very dependent; bright but on and off signs of mild brashness and control failures.

Rating (4) below average in intellectual functioning.
Achievement limited by invading emotional problems; not particularly oriente toward achievement (socially deprived). Specific characteristics: average ability but weak on learning, freezes; attention wanders, somewhat dull, won't produce; not too bright, erratic, loses task at hand; lacks control, achieves erratically because of confusion with emotional content; dull, slow thinking, immature.

Rating (5) poorest of cases seen indicative of least adequacy in this behavioral dimension.
Dull, minimal orientation toward learning or achievement; strong socioeconomic limitations; apt to act out rather than reflect; needs constant "pull" to produce, volunteers nothing; WISC: low Information, wide scatter; low IQ; low verbal IQ; poor use of potential suspected from Rorschach; excessive anxiety in testing, tense, blocked, confused, poor at following directions. Specific characteristics: minimal controls, talks incessantly, rude, not learning as expected; dull, knows very little for age, not learning nor oriented toward learning.

3. Criteria for psychologist's qualitative judgment-grade five boys and girls

a. This pupil has poor intellectual functioning. Many of the factors and variables noted at grade two were applicable for grade five. However, one point should be emphasized: all three tests, particularly the WISC, are better standardized at this age level. The WISC is considerably more reliable at age 10½ than at any other age level. Obviously, ratings for 5th grade pupils could place more emphasis on the quantitative aspects of testing.

Rating (1) best or most adequate in this dimension of children seen.
High IQ, usually 110 or better; fairly even functioning, little scatter, or "reasonable" scatter; especially high verbal scores, good reasoning; assured, quick, speedy, accurate; ability to follow directions; "catches on" readily. Specific characteristics: a scholastically oriented youngster who thinks in terms of intellectual achievement and college; lively, hard working, quick to grasp the point; assured, bright, excellent work habits; high verbal IQ vigorous guessing at answers he doesn't know. Bright, well read, even functioning, capacity for sudden insight and "catching on;" unusual verbal skills, lots of random information; bright, reflective.

Rating (2) good, even functioning, not as high as optimal for this sample.
Good ability but rattles on occasion, or excessively good in one area only; somewhat brash, but brashness is coupled with very good verbal skills. Specific characteristics: very bright but impulsive and inclined to take over, isn't learning as many "facts" as high ability would indicate; IQ high, quiet, but tends to question his own responses, not sure of self, and thinking can be vague (Rorschach); unusual skills in some areas, is not learning effectively in view of this; lacks control, and is defensive--this cuts down on his intellectual efficiency; obsessively learning "everything" yet fails on Comprehension; loss of control, although recovered; bright, uneven, a bit compulsive, good performance partially a result of urging; a moralistic little girl perhaps a bit repressive, fairly bright; performance scores far above verbal.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
IQ is about 90 to 110; performance scores might surpass (average) verbal scores; one distinctly out-of-phase area of functioning; does not verbalize smoothly, struggles to answer; answers the questions with obvious answers; follows directions well. Specific characteristics: average, even IQ, nothing notable; low average, cooperative; average, speedy responses, but typical; average, quite passive; erratic functioning, average to above, overtone of brashness and not in full control of his functioning; average, rushed the examiner to get through; average, assured, but quick to pick up face-saving ploys ("we didn't have that yet"); average, just not very verbal, strains to put it in words.

Rating (4) minimal ability.
Or good ability, frequently impaired by emotional problems. Specific characteristics: excellent performance score but one of the lowest verbal scores; average IQ but a pervasive bizarre quality is present, with over-reaction; fairly bright, over-reacts, obsessive details, confusion; low verbal IQ, sighs, she makes a tremendous job of testing; a low IQ (91) not impressive intellectual approach; quite low IQ (87), doesn't expect to do well.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
IQ is below 100, spotty, erratic, won't respond; over-reacts, wildly erratic, good responses buried in bad; "deaf," needs constant repetition; bizarre

elements; "not there," plays with test material, talks to self; wide scatter, barren responses, Rorschach peculiar content; poor verbal, poor quality and quantity on Rorschach, difficulty in following simple directions; slow responses; confusion in carrying out assigned tasks. Specific characteristics: zombie-like, unpredictable, bizarre reactions (does Block Design vertically), doesn't know basic information; low IQ, erratic, talks to self, scratches himself, whistles, plays with the paper; very bright on verbal, unusually low Performance, over-reacts, floods with personal reference, some weird reactions; dull, unresponsive.

b. There is evidence of severe perceptual difficulties. Perceptual aspects were based on the Bender, with the standard scoring providing quite discriminating. The Rorschach and Block Design on the WISC were also helpful.

Rating (1) best or most adequate in this dimension of children seen. Good, even Bender; few and mild errors; orderly or irregular, but evidence of planning; works quickly and accurately; high Block Design; good form level on the Rorschach; Rorschach F+, M+, O+; good performance on WISC; orderly, neat angles, no negative signs, tidy Bender; Block Designs and/or Bender good; Rorschach has good popular responses. Specific characteristics: top rated Bender and Rorschach, orderly drawing, sharp, clear perceptions; sharp, clear Rorschach and Bender; very good Bender, neat and orderly although Rorschach perceptions slip occasionally, excellent Bender, careful, orderly.

Rating (2) Bender, Rorschach, or WISC Performance Scale may be impaired by relatively slight errors. Specific characteristics: Bender irregular, neat, Rorschach conventional but with an occasional bad sign; Bender: uses all circles, some overlap, but orderly, Rorschach: all populars; Bender fair, Rorschach not so good; Bender: orderly but scallops design 6, Rorschach: good perception; Bender weak but orderly, Rorschach responses clearly seen; Bender performance good but with much frustration; Bender shows reasonable changes short of being confused, Rorschach very conventional percepts.

Rating (3) average, typical, at median level, or in-between best and poorest in this dimension. Performance somewhat spotty but reasonable; irregular to confused Bender sequence; stiff; a bad start improved; not much effort; some overlap; average WISC performance, good Rorschach; neat, random, only one poor sign on Bender; Rorschach form level adequate. Specific characteristics: Bender a bit confused, Block Design low, Rorschach usually clear perceptions; Bender irregular to confused, Rorschach fair; Bender neat, slow, sequence confused, takes it too seriously but overall productions are fair; Bender orderly; slight perseveration, angle difficulties; Design A poor, improves, zig-zag placement, good Rorschach for level; Design A too large, perseverates on Designs 1 and 2, remainder all right; Bender with random, primitive circles, some overlap, Rorschach fair form level; Bender random, somewhat poor and a lack of effort, Block Design good, Rorschach form level good; Bender: Design A expanded, rest randomly placed, some poor form level responses on Rorschach; Bender neat, one overlap, Rorschach minus form level; Bender rigid, Rorschach form level bad; Bender neat, slightly random placement, Rorschach shows endless reworking of same response to most cards; Bender progressively more random placement; Bender rigid, Design 4 detached, good form level on Rorschach.

Rating (4) minimal planning but good execution.
Random rotation or paper rotation; simplification of designs. Specific characteristics: a very good Bender but boxes around drawings, over reacts, and poor form level on Rorschach; Bender neat, draws well, but changes paper around, gives poor impression, rotates first three designs, then improves, on Rorschach perseverates primitive concepts; Bender reproduced all around edge of paper, 2 rotations, poor Rorschach form level; Bender poor, overlaps, incomplete, irregular, confused; tilts drawings on Bender, poor, confused order; Bender neat, 2 rotations, confused, Rorachach form level deteriorates.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Multiple scoring errors on Bender, floating and tilting designs; unplanned, confused placement, crossing out, boxing, many rotations; odd and bizarre; very regressed; low Block Design; form level poor on Rorschach; WISC performance score low. Specific characteristics: Bender confused, overlaps and rotates designs freely, on Rorachach a flood of wildly free associations; Bender drawn at random, crosses out work, Rorschach poor form level, wild behavior problem during testing; 4 rotations on Bender, neat but eccentric, some poor form level on Rorschach, low performance score on WISC; Bender has 7 rotations, draws well but bizarre, Rorschach confirms unusual behavior, Bender confused, 4 rotations, expansions, Rorschach form level very poor.

c. The Rorschach indicates a pupil with severe personality disturbance. At this age it was difficult to differentiate transient age concerns from serious problems, and environmental factors which could be overcome from serious lags in maturity. Rorschach scoring and recommended interpretation was useful, but so was Ames' reminder (1952) that a large percentage of children at this age have no M or FC. Ratings of (1) were very difficult to make.

Rating (1) best or most adequate in this dimension of children seen.
Imaginative, creative, buoyant, lively; productive; one original, clever Rorschach perception; typical concern over self, but also about others; on Rorschach a good M, stable form level, positive content and good use of color; good M and form level, good productivity; calm; sunny, cheerful. Specific characteristics: highly imaginative, creative, yet loads of life, volatile, cheerful; rather pleasant concepts, good popular responses, well rounded; lively, lots of popular responses; unusually rich, creative concepts but still a lively, active boy.

Rating (2) bad start, excellent finish.
Creative, lots of ideas, combined with some negative concepts. Specific characteristics: very creative, imaginative, but some slight withdrawal; creative but a bit lopsided, represses evidence of inner drive; some good signs, the rest neutral or unimpressive; lacks control but generally good on important issues; a bit withdrawn, terribly down to earth; rattles easily yet recovers well, mostly does well.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Flat, uninspired, excess number of populars; or good and bad, uneven functioning, lopsided; difficult inquiry, good concepts poorly explained;

mild meaningful perseveration; one bad response or poor response on one Rorschach card; reasonably calm, average; negative signs contrasted with some good, some creative signs; evasive, but not necessarily pathological; human, conflict. Specific characteristics: good behavior, but signs of anxiety, or guilt; active, frustrated, and stereotyped thoughts suggest some immaturity; good recovery from a poor, irregular start; good signs coupled with some confusion; outgoing, apparently not much inner life.

Rating (4) poor Rorschach.
No human movement or even human content; severe blocking and rejection, can't cope with task; perseveration of one negative idea on Rorschach like "insides." Specific characteristics: several minus concepts and disturbed concepts; strange concepts over and over, reworks on and on; rejected 4 cards, rest only populars; bright, compulsive, ideational, negative concepts, spoils her own good percepts; blocked, no human movement or human content, mainly populars or immature responses; no human content, perseverates "insides," considerable number of inanimate movement responses.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Multiple negative signs, endless precision alternatives, can't make up mind; poor judgment, confused, misses the obvious; excess minus M; no H, color naming, low P, can't improve; peculiar content construction; poor color, poor form level, erratic; anxious, blocked, bizzare with poor form level, disturbed content; perseverates, barren ideas; perceptual distortion and confusion, severely limited content, pathological anatomy content; loss of control; blocking. Specific characteristics: Rorschach dull, some minus responses on important cards; wild flood of ideas, many negative responses, vague, M-; highly frustrated boy with bizarre responses (e.g., "fly's face").

d. This child has problems relating to classroom teacher. This rating is based directly on the child's ability to relate to the examiner. The testing situation presented a classroom-like atmosphere, and the examiner could be considered as serving as a teacher surrogate. It was assumed that the child reacts to the examiner as he might to a teacher, and that the examiner's impression is much the same as a teacher's, particularly in terms of the child's behavior. The examiner deliberately allowed himself to be "conned" in this rating, minimizing underlying problems when the child presented a facade of adequacy.

Rating (1) best or most adequate in this dimension of cases seen.
Shy, quiet, effortful, cooperative (puts things away for examiner); initiates own behavior; bright; good natured, humorous, lively reaction, cheerful; some reserve; conforming, successful accomplishment; relaxed with examiner, control with spontaneity; good M+ on Rorschach; alert, very cooperative; tries to please adults; persistent, even if slow; answers questions readily, verbal; self critical, appropriate. Specific characteristics: shy, sweet, longhaired little blonde, a room monitor, bright, unusually even, capacity for sudden insights; bright, verbal, neat, cooperative, and reserved. Said "goodby" formally when leaving; brighter than most, well controlled, yet all around boy; big blonde, polite, humorous, controlled with high social awareness.

Rating (2) less ability, or less efficiency than optimal rating.
Surface control with some lapses as pressure rises; mild slips. Specific

characteristics: pleasant, very assured, but only average IQ and quick to cover her inabilities with mild defensiveness; productive, rattles slightly but improves, showing humor and distance from mild problems; cute, moralistic, tendency to hysterical character traits; good, quiet "well adjusted" first impression but control seem superficial, and under pressure might lapse; skinny, shy, beaming little girl, charmingly embarrassed; quiet, well behaved, cooperative, helpful, a little dependent; grinning, freckled boy, initially over reacts to WISC, making too much of it, but recovers well.

Rating (3) average, typical, at median level or in-between best and poorest of cases seen.
Nothing specific, appropriate behavior; more effort for results than seen in children rated higher; occasional over reaction, talking out of turn; occasional nervousness or suddenly rattled; not particularly at ease with an adult; fairly passive, fair relationship with examiner, good control; responds to slight urging with positive reactions; works for acceptance; responds to encouragement. Specific characteristics: a quiet, subdued, very "average" boy; handsome, not at all verbal, perhaps erratic in class at times; wide eyed, strained, struggle to answer; average, pleasant, sturdy girl, very average ability; average, has a "sniffle," reworks her responses getting nowhere.

Rating (4) dull, uninterested.
Doesn't expect to do well; rushes the examiner, tries to take over; brash ("heck, don't ask me!"). Specific characteristics: low verbal skills, brash, rushed the examiner, would not stick to task; chronic nail biter, shy, giving-up behavior; brash, unstable functioning, excited self-comments, combined with surprisingly good achievement; resistant and mute, held out on everything; very bright, very compulsive, became very frustrating to examiner with her insistence on doing things "just so;" dull, slow, confused, very difficult to question.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Extremely brash, unpredictable; refuses to try; dependent, infantile; needs constant urging, won't work alone; flooded by own thoughts, outbursts, non-sequiturs; whistles, can ignore examiner's efforts to control him with gestures or words ("the heck with it!"); obsessive trying, can't accept own limitations, thereby keeping examiner on edge, discrepancies in performance compared to IQ level; resentment of test situation; not comfortable with examiner; tense and scared; poor control; marked open or covert aggression; low IQ and personal problems; constant need for approval; does everything wrong; extreme rationalization; manneristic, inattentive; overdependent; overly suspicious of examiner; withdrawn. Specific characteristics: unusually brash ("Oh, not that again!"), over reacts, unusually preoccupied with self, many non-sequiturs in the middle of test responses; whistles, scribbles over work rather than erase, plays with material, doesn't concentrate; grabs material from examiner, unpredictable, dull, odd stare, zombie like.

e. This pupil meets learning tasks effectively. This rating was based on the child's level of intelligence, the effectiveness of its application, his approach to new tasks (Bender, Rorschach), ability to utilize the teacher (here, to accept help from the examiner), and the estimate of his achievement, as indicated by such aspects as WISC Information.

Rating (1) best or most adequate in this dimension of cases seen.
IQ high - 110 to 120 level, even functioning; high Information, good Bender; bright with initiative; accepts own failures without rattling; reflective, productive, enjoys working; stable, no anxiety in test situation; cooperative, eager, anxiety doesn't lower maximum effectiveness; IQ not interfered with by personality problems; good usage of time, with accuracy; tests even better than appearance would suggest; asks relevant questions; well organized. Specific characteristics: bright, unusually even functioning, meets new tasks with great effectiveness; well controlled, unusually intelligent and effective in all areas; reflective, good verbal skills; excellent verbal skills make up for some rigidity and mild problems--obviously an effective learner; readily picks up information, bright, efficient in school areas; quiet, well behaved, has the ability to adapt to classroom demands; excellent work habits, evidence of learning.

Rating (2) good achievement and IQ.
A higher performance IQ than verbal IQ suggests could do even better, high Information out of line with other verbal scores, uneven application. Specific characteristics: verbal skills not above average, coupled with his having been raised abroad and a very fine Rorschach, suggests he has potential but is not a top learner; good verbal skills plus really excellent performance skills, apparently reflect limitations due to obsessive defenses; again the skill in performance not in verbal area, with blocking and a "moralistic" and "repressive" attitude; verbal skills poured into practical areas, minimizing learning per se (Comprehension well above Information); very bright, especially in performance skills, but brash, grabby attitude would call for outside discipline; fantastic fund of information but not effective, less a problem solver than he should be; good learner, suggestion of some unused potential, strains a bit; nice cooperative girl but IQ suggests less potential than a top student needs.

Rating (3) average, typical, at median level or in-between best and poorest of cases seen.
Average IQ, fair Bender; requires some urging; sometimes obliged to verbalize or vocalize thinking, not too smooth here; could do better, but passive or erratic; starts very well, then rattles in one area so dramatically that rating drops from 1 to 3; less achievement than ability would indicate (as in a drop in Information); 90-100 IQ, cooperative, average Information; needs careful instruction, but follows accurately; asks questions indicating slow catching on. Specific characteristics: verbal IQ only average, occasional indications of emotional problems with recovery; low average IQ but is learning at own level; very passive in problem solving in spite of average or better ability; over reacts, memory gaps, talks too much while working; pours his energy into work with hands, poor verbalizer, rushed the examiner, doesn't wish to stay with "learning" tasks; unused potential, doesn't finish his Bender; good start, good verbal skills, but serious rattling, very susceptable to anxiety producing situations, which tend to make him confused; high ability yet minimal learning (low Information); good ability but lapses which suggest she might not follow through on her work after good start; very average in all areas.

Rating (4) emotional problems limiting learning ability.

dull, very passive on intellectual tasks, minimal achievement (low Information). Specific characteristics: very low verbal as compared to performance scores, terribly anxious, slow, can't present her ideas coherently; lower IQ, few facts, unreflective; minimal accumulation of information in spite of good ability, mildly bizarre aspects; very bright but compulsive tendencies must be seriously limiting her effectiveness; shy, very dull, not oriented toward learning or achievement.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Quite low IQ, poor Bender, especially with rotations present; can't screen random thoughts; over reacts; constant chatter, unpredictable; very shaken by failure, can't recover; blocking, needs more urging than is available, combination of low IQ and erratic functioning; anxiety in test situation; uncooperative, blocked, low Information; disorganized, doesn't follow directions; wild guessing; perseveration, sticky thinking; concrete thinking. Specific characteristics: fails to achieve on any test in the battery, never able to come through, dull, "grabby;" every evidence of a poor student; scribbles out work, whistles, gives up, acts up, and hasn't learned; excessively mute, rates low because she would not produce; verbal versus performance shows fantastic divergence in favor of former, but over reacts, acts out, unable to produce; dull, unresponsive, "deaf," slow.

f. This child has creative potential. Whatever creativity may be, it seems progressively more approachable as a concept as a child grows older. The following appear to be factors relating to productivity: intelligence, productivity, availability of a wide range of ideas, imagination (Rorschach). Perhaps also, a certain degree of planning ability (Bender) would be called for in that the child who could handle everyday tasks effortlessly would have both time and energy for creative thoughts. Creativity would be counterindicated in a child who had a rigid need for order -- his time would be "bound up" in achieving order at the expense of creativity. The psycho-analytic concept of "regression in the service of the ego" has proved helpful in identifying gifted adult artists, and should be applicable to children. Thus, a child's freedom to produce a few poor Rorschach responses, or "far out" ideas, when coupled with signs of control, would suggest creativity.

Rating (1) best or most adequate in this dimension of cases seen.
High intelligence, lively imagination, spontaneous flow of ideas; lively Rorschach (M's especially); good, free M, wide, varied content, excellent original responses; spontaneity; uses many aspects of Rorschach cards for responses. Specific characteristics: unusually high verbal IQ (142), very high number of responses on Rorschach with 7M, 7FM, and a spread of other responses; bright, highest on reasoning, 9M plus lively CF, lots of ideas; bright, particularly good sudden insights, well balanced Rorschach; bright, recoverability of Rorschach suggests a creative bent, also some pleasant responses; a wild but very good and original imagination (6M) in a very unverbal child -- must be full of bright ideas!.

Rating (2) intelligent and imaginative, not as effectively applied.
Occasional confusion or lapses; less intelligent and imaginative than a higher rated child. Specific characteristics: fairly imaginative, yet verbally only average and at a loss for words; major skills and concerns are in introversive areas, apparently has problems relating to others, so might turn toward creative pursuits; imaginative, works effectively; quite a few ideas, can recover well from rattling, ideas good; smart,

lively, less creative than some but probably full of verve; unusually ideational, 8M, lots of drive, bright, but could compulsively beat her own ideas to death; smart, creative, nonconformist, a future beatnik.

Rating (3) average, typical, at median level or in-between best and poorest of cases seen.
Nothing outstanding on WISC or Rorschach; a routine, orderly kind of thinking; average IQ, few M, average number of R; more apt to act than reflect, but some imagination. Specific characteristics: bright but perseverates the same ideas, no freedom of inner life; average in all areas; average-plus ability, a rather frustrated boy who has no extra energy free for creative tasks; action-oriented, no time for reflection; well behaved but no evidence of creative energy; average and unreflective; creative (5M) but low average IQ; bright, controlled, with possible outbursts rather than creative potential; all energies go into being a "good" girl, none left over.

Rating (4) perseveration of ideas suggests a lack of creativity.
Ineffective intellectual functioning may block the few signs of imagination noted; dull. Specific characteristics: not too bright, imagination like a young child, nothing original, also some "pars par toto" thinking and a faint bizarre note; obsessive thinking, minimal creativity; too preoccupied with infantile concerns, unresolved family conflicts, no freedom for concern over others; perseveration of the most mundane ideas, reworks and reworks, getting no where, not one original thought; he has imagination but it controls him, rather than the reverse, and he can't tell the difference between his distorted, malignant concepts and those with at least a spark of originality; dull, perseverative thinking; very blocked in spite of good reasoning ability, no freedom to produce; very bright but his thinking is unstable and disturbed, he is preoccupied with "blood, bones, your insides," and fails to produce any but the most commonplace -- or disturbed -- ideas.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Low IQ, flat Rorschach; immature, perseverates simple concepts; no available resources; or too emotionally involved to utilize ability; Rorschach stereotyped, banal content, low IQ; constricted; flat, dull ideas; Rorschach few if any good color responses, narrow range of content and determinants. Specific characteristics: dull, unreflective, infantile ideas; on Rorschach rejected 4 cards, lower IQ, no signs of any freedom of ideas; much reworking of simple ideas suggests he would spend "creative" time tinkering with nothing, even though he has good ability; dull, very limited ideas.

g. This pupil has poor school adjustment. Here, adjustment in the classroom and the school yard were evaluated. Peer ratings were particularly difficult to estimate, but it was assumed that they shaded into reaction to adults, sometimes inversely. Thus, the child who got along "too well" with the teacher might be rejected by other children as a teacher's pet. An overly subservient child might not be appreciated by his school mates, although he pleased his teacher. An active, sturdy youngster might succeed on the play ground even though he froze up in class. Grades, per se, were minimized here, except as they might win a child approval, or cost him acceptance. Other research has suggested that intelligence correlates well with peer popularity.

Rating (1) best or most adequate in this dimension of cases seen.
Friendly, spontaneous, interested in people, polite, thoughtful; warm response to examiner, helpful; lively, sometimes a bit impulsive, able to smile at his own errors; well controlled; Rorschach color variables indicate warmth and control; positive adjustment to test situation, good WISC and Rorschach, stable functioning; anxiety free, intelligent, happy and eager; proper degrees of aggressiveness, passivity, absence of constriction; motivated, independent, especially alert, motility. Specific characteristics: not especially smart, but Rorschach suggests creative, warm, reactive child; a very evenly bright, achieving, responsive child, bright, creative, warm.

Rating (2) some reserve or blocking; fewer of the features characterizing optimal ratings.
Specific characteristics: some repressive tendencies, might be a bit of a moralist, but has ability and warmth; susceptable to pressure, rattles yet recovers, bright, would assume less than desirable social adjustment; an hysterical little girl who has limited freedom both socially and in learning areas, in spite of ability; very strong on social adjustment but nothing special in achievement; reflective little magazine-salesman type who is outgoing but should not be too socially adept, and a fair student; nice, cooperative, a bit inhibited; bright, warm, well balanced; bright, good reasoning, reasonable, but a little inhibited; very bright, stylized speech of a pre-teener, yet can cooperate socially and in classroom.

Rating (3) average, typical, at median level or in-between best and poorest of cases seen.
Just one of the group; sometimes self-centered or passive; tries to rush through; less frustration tolerance than appropriate; socially deprived, so he is less at ease in new (middle class) situations; average ability; cooperative, tries to follow directions, tries to please authority. Specific characteristics: not much of a verbalizer, yet highly ideational; average ability, has a creative side, less social involvement, and some confusion; a touch of various skills, a social and an inner life, yet just seems average; possible frustration and depression coupled with "reserves;" pleasant, average, some rather odd-ball ideas; lower verbal IQ, fairly immature.

Rating (4) dull, too shy, holds in, little to offer others.
Great self concern; tends to act out or to rattle, but responds to control; perseverates same ideas over and over again. Specific characteristics: low average IQ, very unproductive, holds back, probably not productive in school or able to share with friends; bright, too compulsive; would not do for others, can become confused; dull, disturbed; strong evidence of emotional disturbance, presumably it invades all areas to some extent.

Rating (5) poorest of cases seen indicative of least adequacy in this behavioral dimension.
"Odd-ball," odd ideas, acts out wildly, unpredictable; blurts out things, grabs material; frankly hostile toward others, personal reference regarding fighting; isolate, can't fit in; low frustration tolerance; negative reaction to tests; anxious, disturbed Rorschach responses; resentful or withdrawn; strong anxiety; dull, unhappy; possibly "organic," perseveration, learning block; hyperactive, comprehension difficulties; overdependent;

low motivation for learning; overt demands on teacher; physical abnormality; depressed. Specific characteristics: dull, odd, acts out; minimal frustration tolerance, is not learning; over reacts, very disturbed, decompensating.

h. This child has poor school achievement. This rating summarized and weighed a number of previous ratings. Thus, intellectual functioning, and meeting learning tasks were obviously involved. To a lesser extent, relationship with the teacher as it might affect achievement was added. Extreme ratings in any of the other areas would probably be reflected here. As an example, perceptual problems would presumably limit school achievement if they were marked.

Rating (1) best or most adequate in this dimension of cases seen.
High IQ (120's), high Information, bright, quick; loves to achieve on tests, volunteers information ("I like big words"); appropriate, lively reactions; notably efficient in approach; comfortable approach to test, some drive, a need to succeed; high verbal IQ, relaxed, with verve; motivation, functional efficiency; quick response, accuracy; quiet, even withdrawn, but persistent, relevant; appropriately self critical; well organized, compulsive, verbal. Specific characteristics: an all around bright, insightful, warm,well adjusted child, who certainly must achieve well; high IQ for his school, signs of achievement beyond level of ability; bright, reflective, reserved, looks like an achiever; accomplished, unusually verbal, defensive about achievement, everything must count.

Rating (2) very good, but one "rattle"
Doesn't achieve quite as well as should, in terms of IQ; a bit passive, yet high on Information, suggests he would learn some things, not others; thinking sometimes vague or erratic, yet generally at a high level. Specific characteristics: everything else at a one level but he seems to be achieving a bit below potential; quite the opposite, many bad signs, emotional, brash, yet he is controllable and he is very bright, achievement is likely; bright but not achieving as measured by Information, in view of other signs, must rate at this level; bright, achieving, but nervous and too talkative in his work; bright, achieving, but nervous and too talkative in his work; bright, achieving, but somewhat erratic, can be vague, better control on surface; achieves fantastically, but a bit negative, anxious to leave, in other words not as achievement-oriented as a "teacher's pet;" an achieving little girl but less controlled than optimal; bright, but verbal skills lower than performance skills, well adjusted and orderly, assume a "B" student; she is not picking up expected Information, in spite of great ability, limited by repressive defenses; bright, achieving, well read, some emotional concerns could limit achievement in class slightly.

Rating (3) average, typical, at median level or inbetween best and poorest of cases seen.
Average IQ, comes through as needed; better in some areas than others, averages out; passive in achievement areas; calm; slow but persistent. Specific characteristics: nice, cooperative, average; average ability in all aspects; a flat average; average for her school; bright for this rating but compulsive, ideational thinking is limiting her achievement; favorable signs of achievement but slow,average, thinking close to perseverative; a peering, struggling boy with only average ability.

Rating (4) generally low in intellectual functioning.
Very low verbal,ability, high performance skills; some brash, rushed through, "get it over with" attitude; will not cooperate. Specific characteristics: minimal achievement for ability plus signs of confusion and veering on bizarre thinking; verbal too far below performance, obsessive detailing, erratic; one of the lower IQ's; low verbal plus great difficulty in expressing ideas.

Rating (5) poorest of cases seen indicative of least adequacy in this behavioral dimension.
Low IQ, very dull; cannot tell good from bad ideas, good immersed in bad; may pick up school skills, but won't or can't give it out, excessive "don't know's;" attention problems; low frustration tolerance; not picking up Information at expected level; poor Bender in areas related to school skills; much test scatter; poor use of potential; excessive anxiety in test; tension, hostility toward testing; blocked, confused; withdrawn with autistic behavior; low verbal skills; cannot follow directions adequately; tangential thinking; low motivation; poorly organized. Specific characteristics: one of the lowest IQ's particularly low in Information, generally dull and unresponsive; has learned a lot, but is highly disturbed at this time, inference is that he suddenly would draw pictures during class or relate to others his concern about his overweight; one of the lowest Information scores plus a general unresponsiveness; has not learned, random acting out; unpredictable, an "unknowing" boy; one of the most resistant, "mute" girls in sample.

F. Hypotheses related to psychologist's data

The psychological examination is an indispensable part of a comprehensive clinical appraisal. An individual intelligence test, some projective tests, additional specific assessments and observation during the examinations are considered the basic armamentarium of the psychologist in making his diagnostic appraisal. In the clinical evaluation of children, the tests used most typically are the Wechsler Intelligence Scale for Children (1950), the Rorschach and the Bender Visual Motor Gestalt Test (1938). Scores on the above instruments are considered to be only the minimal data to be derived from the examination. The reaction of the child to the test setting, his self control, anxiety, reactions to failure and frustration tolerance are important sources of information in making a summary personality appraisal.

Even though the selection of tests for the battery which is used in a psychological evaluation is rarely questioned, and inferences made from this testing are considered fairly valid for the individual case, little is known about the validity of certain psychological signs for the general population. For example Fromm et al (1957) suggested that intelligence test responses have great value in the study of personality, since the test items can be viewed from a dynamic point of view as "personality" variables. Certainly Glasser and Zimmerman's work as previously cited suggest some very specific types of test response which have meaning for individual assessment. Nevertheless there is a paucity of validity studies which relate specific test behavior, or specific types of test response to other indices of individual functioning. As Littell (1960) suggests in his review of the research conducted on the WISC in the ten years since its introduction, there are practically no validity studies on the WISC as a measure of differential intellectual functioning, not to mention the lack of validity data on the use of the WISC as a personality instrument.

While comparisons of WISC scores to achievement test data have been made, the research on specific types of WISC response for groups such as delinquent, emotionally disturbed, and neurotic have led to inconclusive findings. Lessing (1963) compared the WISC scores of children seen in a child guidance clinic and found that when WISC IQ's were held constant and compared to group intelligence test scores, wide scatter on the WISC sub-tests appeared to be related to underestimated intelligence. However when extreme sub-test deviations on the WISC were compared to diagnostic categories, Frost (1960) suggests certain patterns which were common to cases judged to be obsessional, psychopathic, immature, repressed and severely disturbed. The patterns are not of particular interest here since none of the extreme deviations were associated with any one diagnostic category, nor discriminated between categories. The patterns which did occur could have been due to chance, or due to other factors. When the WISCs were compared of children diagnosed as either "adjustment reaction of childhood with neurotic traits" or as "conduct disturbances," the former group had higher verbal and lower performance IQ's, but both groups had similar sub-test profiles. McHugh (1960).

Maxwell (1961) evaluated the WISC scores for 205 boys and 87 girls referred to an English child guidance clinic. The referring problems were behavior disorders, stealing, temper tantrums etc. There was consistently more sub-test dispersion than what was suggested by the test author. Most of the mean sub-test scores for girls were below 10 except for Similarities. The average sub-test scores for boys were below 10 also except for Similarities, Vocabulary, Picture Completion and Block Design. When specific sub-test scores were compared, the author suggests that maternal solicitude is related to lower Picture Completion scores, disturbed family and social relationships are related to higher Block Design and Object Assembly, and a lack of a father in the home is related to performance on Comprehension, Picture Completion and Coding. Such findings provide interesting hypotheses, but they need cross validation and can be affirmed only by application to a general childhood population and not to a clinic sample.

Matthews (1958) studied non-achieving children as a group. When etiological classifications were compared, those children who were classified as emotionally disturbed had most sub-test scatter and least perseveration. The average IQ scores for the whole non-achieving group was somewhat below 100.

In addition to studies of WISC sub-test patterns as they relate to diagnostic classifications and to developmental history data, the WISC has been used to assess progress in treatment. Hiller and Nesvig (1961) administered the WISC and the Bender to children in a psychiatric hospital three times over a period of one to two years. The WISC Verbal IQ and the Bender Gestalt improved; however, the children's scores on the verbal sub-test were originally low. Petrie (1962) on the other hand found no differences in children's WISC scores after a one year period in a residential treatment center.

What all of these findings do show, however, is that the WISC scores of children seen in child guidance clinics, or classified as emotionally disturbed or as having other adjustment problems of childhood are nearly always below average or lower than groups with no adjustment difficulties. Even in cases of non-achieving pupils, the emotionally disturbed non-achieving group had even lower IQ's than the below average IQ's of their non-achieving peers. Apparently it is the deficit in intellectual potential which is the principal predictive datum to be derived from the WISC in comparison of children with and without adjustment problems.

About the same situation exists with the Rorschach. Most of the studies have been conducted on child guidance clinic populations or on children otherwise identified as having achievement or adjustment problems. Within the last decade norms for children have been provided. Ames (1952) compared Rorschach findings with the Gesell Developmental Schedules for children ages 2 through 10. However, the children on whom the norms were based came from families with parents at the managerial and professional level. The bias of socio-economic level on Ames's

Rorschach norms was studied specifically by Fiedler and Stone (1956) and they found some important differences in higher and lower socio-economic groups. Ledwith (1959) also provides some normative data for children, ages 6 through 11. Ledwith's and Ames's work along with Klopfer's standard interpretative guide to the Rorschach (1954 and 1959) are the principal references for the use of this test with a childhood population.

Robbertse (1955) compared children who were judged to be pre-delinquent and to have behavior problems with a matched control group of 100 cases. He found significantly more card rejections in the maladjusted group and the maladjusted group had a lower reaction time to the cards. In a study of the relationship between Rorschach scores in kindergarten and reading achievement in the primary grades Meyer (1953) found significant differences in the use of color, number of whole responses, and the number of card rejections when children with above average and below average reading achievement were compared. However, the IQ scores of the retarded reading group were also significantly below those found for the achieving group. This latter finding suggests that intelligence test scores are an important part of the study of Rorschach patterns. Socio-economic status, which was mentioned as a probable source of the differences between the norms of Ames and other workers has also been studied directly as a variable in Rorschach performance. Northway (1947) found a curvilinear relationship between certain Rorschach scores and sociometric status and Rychlak and Guenonard (1960) found socio-economic status related to specific content on the Rorschach protocols of 6th grade pupils.

The Rorschach has also been used in studies of the progress of children's psychological treatment. Siegal (1948) studied 26 children over a one year period. The Rorschach signs which were associated with a favorable response to psychotherapy were the number of form-color (FC) responses, number of whole card responses, good form level, human content and originality. In a later study (Lessing, 1960) none of the tests of significance proved to be above a chance level in studying the prognostic value of the Rorschach in a child guidance clinic.

Several factor analyses of the Rorschach provide some idea of what accounts for differences in patterns of scores. Some of these studies use the location and determinant scores, but omit the content categories. In a study of 92 Yale students five factors were extracted. The first was called intelligence or originality with FC appearing with the highest loading; the second was called low perceptual control with the texture and shading determinants (which are rarely used in children's Rorschachs) with highest loadings; the third was determined by the movement responses and called intratensive or general sensitivity to inner stimuli; the fourth an inner control factor composed of loadings on human movement, form or form-achromatic color and labeled creativity; and the fifth factor contained high loadings on the color determinants and called "outer control," or controlled emotional responsiveness.

The labels given to Rorschach factors can be understood when one refers to traditional Rorschach interpretation. In general, response patterns which use the obvious card characteristics such as form and color are considered to correspond to other variables relating to extroverted personality types. The use of human movement and other types of movement responses in which something has to be "added" to the response is usually considered to represent an introverted personality pattern or a sensitivity to inner stimuli. When the texture and shading determinants are used, and they are rarely found in children's records, the interpretation of personal anxiety is common. Piotrowski (1957) and Klopfer (1954) as well as other psychologists are in agreement that Rorschach responses which use the form-color aspects of the card indicate at least a capacity for involvement with the environment, and a willingness to respond to the task. With animal and human movement responses the card has to be enlivened by the projection of concepts which are more profound than the obvious card characteristics. Animal movement responses are much more common in children's records than are the human movement concepts.

The most obvious locations used in Rorschach responses are the large detail area of the card. Whole responses, on the other hand require minimal differentiation of the blot. When a whole response involves the integration of several large and small details into a well-organized response this pattern is thought to correspond to a high intellectual level with abstract conceptualizing abilities. The small detail responses involve the least integrative ability. .A large number of small detail responses indicates an effort toward a large number of responses at the expense of other possibilities.

Popular responses which have been well-defined by the authors of most of the literature on the Rorschach can be considered modal responses to particular cards. Thus a bat on card I, people on card III, a bat for card V and so forth are typical of the types of responses which occur in enough records to be considered "populars."

At least three scores are given to each response: location (W, D, Dd, and S) determinant (M, FM, m, FC, CF, F etc.) and content. The most meaningful Rorschach interpretations are given in individual cases, not on the basis of normative data such as the differences from the mean in number of human movement responses, the number of whole card responses and so forth. A response which uses the whole card and which involves an unusual use of the card material in a highly original concept is still scored according to the Klopfer scoring method as a "W." If human movement is contained in the response, it is scored M also. However, a score of W and M could be earned by a far less creative, well integrated response. Some effort at noting these differences in responses have been made by adding a minus or plus to the response, but the criteria for these modifiers are not well established and the interpretation may vary from psychologist to psychologist. In Bendig's study (1955) he confirms this by stating that the scoring categories do not have diagnostic validity while the "clinical" interpretation may have greater significance. Nevertheless the Rorschach scoring procedure can be taught and learned, and may provide valuable predictive data if its weaknesses for personality interpretation are considered and if some method for evaluating the move subtle quality-aspects of the Rorschach responses can be established.

Factor analyses of the Rorschach scoring categories might be more meaningful if the specific scoring procedure were defined and the resulting factors were labeled according to the scoring categories with highest loadings on each factor and not by extrapolating to interpretations which may be valid in individual cases, but not when applied to groups. Thus in Wysocki's work (1960) the factors which were derived were called intelligence levels, intelligence control vs emotional impulsiveness, reality vs schizophrenic orientation and restricted affectivity vs emotional volatility. If this author were to attempt to cross validate these factor categories, he would have a difficult time finding external criteria for these factor descriptions.

Lotsof, Comrey and others (1958) factor analyzed the WISC with the Rorschach using the protocols of 72 cases ages 7 through 15 seen in a remedial reading clinic. The content categories were used in the analysis along with all of the WISC subtest scores. The WISC verbal sub-tests received high loadings on the first factor which was extracted. Factor II contained the Rorschach large detail responses, small detail, some content categories and inanimate movement. The second factor was labeled productivity by the authors. The use of the white space on the card, animal movement responses, and inanimate movement along with human detail as content categories characterized the third factor. An age factor appeared as factor IV and the only other factor which was worthy of their interpretation was a WISC performance test factor with those subtests which required speed of performance for high scores. In this work the factor interpretations are much closer to the obvious nature of the variables which make up the factors rather than to more intuitive interpretations.

Even though the Bender has been available as a psychological test for over 25 years its use in research studies has been limited by difficulty in scoring the protocols. Pascal and Suttell (1951) provide a comprehensive scoring scheme in which every design was evaluated according to at least eight criteria. These criteria were rotations, curvatures deviations, angulations, closure difficulties, perseveration, truncation, size deviations and so forth. Their scoring scheme was time-consuming and demanding. In the Pascal and Suttell volume some norms were provided for an adult sample and the remainder of their work was devoted to a study of how the Bender differentiated between normals, neurotics and psychotics. A small amount of data for children was presented, but the sample was biased not only in terms of intellectual level, but also in terms of socio-economic status.

Even though objective scoring procedures for the Bender have inhibited research study of this instrument, 80 percent of the clinical psychologists surveyed by Schulbert (1961) regarded the Bender as having "some" or "great" diagnostic value. The test has been used most commonly in cases where a question or organicity is raised and least used for uncovering personality characteristics. Hutt (1960) suggests, however, a variety of personality interpretations which can be made from the protocols and the placement of the figures on the page. His work, possibly meaningful with an individual case, has questionable validity when applied to groups of subjects on whom blind analyses of the Bender protocols would be compared to other validity criteria. Tamkin (1957) makes a special case [illegible] the need to know the frequency of occurrence of certain deviations in the reproduction of the Bender designs before one can know whether he is predicting better than chance.

In 1956 Byrd compared 200 cases of children judged to be well adjusted with an equal number of children considered to be emotionally disturbed. Out of a great number of statistical comparisons several were found to differentiate between the two groups. The arrangement of the drawings on the page, changes in curvature, closure difficulties and rotations are examples of those scoring deviations which differentiated between the groups at the 5 percent level or better. Clawson, in a fairly complete review of the Benders of children seen at a child guidance clinic compared with a classroom sample of pupils of the same age found also that page arrangement, closure and curvature deviations and rotations differentiated between the samples. Workover on drawings and erasures which had been thought by Pascal and Suttell to be a significant finding in their neurotic cases were more frequently found in samples of well adjusted pupils by Clawson. Size and angulation deviations were also found significantly more in Clawson's clinic sample. Her work has recently been published as a clinical manual for the use of the Bender (1962). Koppitz has used the Bender extensively with young school age children. Her scoring system is much less comprehensive than that proposed by Pascal and Suttell and was established by a review of those deviations which differentiated between above and below average students in the 1st grade. Only 30 items are checked and scored as to whether present or absent and the type of pattern or gestalt deviation which is scored varies with the design (1960). However, Koppitz provides a good bit a data on this scoring system in differentiating between good and poor school achievers. Even though Koppitz provides fairly impressive evidence for the use of the Bender in differentiating between good and poor achievers at the first grade level, Lambert (1963) used the Bender scoring system described previously and found that only size deviations differentiated between good and poor male readers at the 3rd grade level and that work habits including erasures and workovers differentiated between good and poor female readers with a greater degree of poor work habits found in the sample of girls. However when the groups were divided on the basis of group intelligence test IQ, significant differences were found for both boys and girls in the number of gestalt deviations with the pupils with the lower IQ's making the poorer performance.

Koppitz's work remains as the only effort at normative information. Her work is limited in the fact that the more comprehensive scoring systems have been ignored in favor of her simplified version based on those categories which differentiated between good and poor 1st grade students. In this project the Benders were scored by a modification of a procedure developed by Clawson and cited previously. The criteria for each of the scoring categories was described in another section. In order to keep the number of variables in the factor analysis to a minimum only the major gestalt and size deviations were included as the Bender variables; however, all of the protocols were scored by a single scorer according to page arrangement, gestalt deviations, size deviations and work methods.

No factor analysis of the Bender has ever been attempted. It is difficult, therefore to develop a hypothesis about how this instrument would relate to the other psychological examination procedures.

The data provided from the psychological appraisal for the project sample included the psychological test scores (WISC, Rorschach and Bender) and all of the psychologist's observations and qualitative judgments. The test data were combined into one factor analysis and the observational and qualitative judgment data were included in a second analysis.

Altogether 26 variables are involved in the factor analyses of the psychological test data. The analysis should yield one or more intelligence factors from the WISC scores. Even though the Rorschach has been suggested as measurement of intelligence, the mental task involved in these two tests differ sufficiently that they will no doubt be independent of one another. Deviations in reproductions of the Bender designs have been shown to relate to general intelligence in the work of Lambert cited above; some loading of specific Bender scores on the hypothesized intelligence factor might occur as a result. A perceptual or visual motor factor should occur with loadings of Bender scores and the score from the Block Design sub-test of the WISC may be found in such a factor. The Rorschach should produce at the least one productivity factor. A productivity factor is predicted because all response categories are related to the total number of responses to the test. Unless a pupil's responses belong to only one or two types of scoring patterns, the more responses he makes, the higher the score in each category. The total number of Rorschach responses is not included in the list of variables to safeguard experimental independence of the data.

The second set of data from the work of the psychologists is composed of the psychologists' ratings of the clinical impression of the pupil during testing, attitudes toward the examiner and test materials, and the qualitative judgments made at the end of the testing period where every pupil the psychologist saw was evaluated with respect to every other one to arrive at a distribution of pupils over each of the qualitative judgment variables. Hypotheses about the way the variables should arrange themselves in factors are difficult to make. Nevertheless one can predict that the psychologists will be appraising intellectual abilities, personality and visual motor or perceptual skills.

G. Results of the analysis of psychological test data

Means and standard deviations for all four samples for each of the variables can be found on Table 7. The correlation matrices for the four samples follow on Tables 8, 9, 10 and 11. Finally the factor coefficients for the factor dimensions can be found on Table 12. The comparability of the factors for each sample can be determined by noting those coefficients which are of large and moderate magnitude and then by locating comparable sets of variables corresponding to factors in one or more other samples. The interpretation of the factors for each sample is as follows:

1. Results of the factor analysis of psychologist test data for 2nd grade boys
    a. Factor 1. Rorschach productivity with use of details. The cluster

of variables describing this factor are the Rorschach scoring categories, the number of small details (d), unusual details (Dd) and large details (D). In addition, the number of human movement responses (M), and responses with form-color determinants (FC) are also loaded significantly on this factor. This factor appears to be Rorschach productivity without the use of the whole card in responses. The child's orientation is one of picking out both large and small details and ignoring the overall characteristics of the card. Such responses have been interpreted as an accuracy compulsion and compulsive behavior and anxiety have been inferred from children's responses of this type. Piotrowski (1957) interprets this pattern of responses as "drilled to show respect, dulled, though inoffensive." For present purposes, productivity with the use of details appears to be an appropriate label.

b. Factor 2. Verbal ability with aspects of compliancy. The cluster of variables on this factor are the WISC Information, Similarities, Comprehension, and Picture Completion scores. Block Design, which is the remaining WISC sub-test included in the analysis, received a much lower loading on this factor. The omission of Block Design may have occurred because of the lack of "bottom" on the test at this age level, with some credit given even when the child's performance is minimal and few children able to earn any bonus points. On the Rorschach the number of responses determined by form-color (FC) is also loaded on this factor. FC had a moderately high loading on the previous factor as well. Piotrowski has interpreted the giving of FC responses as behavior which is performed to please adults. Certainly a child who is willing to perform as well as possible on the WISC would be one who is interested in gaining adult reward and recognition, in addition to being able to conquer the challenge of the test items. This factor seems best interpreted as verbal ability with aspects of compliancy.

c. Factor 3. Poor motor control and low developmental age. Factor 3 is a factor made up of scoring deviations on the Bender Gestalt Test. The two variables in the cluster are the number of drawings with curved or pointed sub-parts, and the number of drawings with curvature deviations. In addition, deviations in closure, and number of drawings with decreased number of units is also loaded on this factor. Deviations in reproductions of the Bender designs are usually interpreted as evidence of perceptual difficulties; however, this pattern appears to be best explained by making the inference of perceptual difficulties, as determined by age and motor control. Since the errors were those of inaccuracy primarily or inability to make neat junctures on the design reproductions, motor control and developmental age seems to be the most suitable interpretation.

d. Factor 4. Expansive and careless test behavior. The fourth factor is also made up of scoring deviations on the Bender. In this case the cluster is composed of the number of drawings which are increased in size as opposed to those which are smaller than the design stimuli. An additional variable also loaded on this factor is the Rorschach scoring category, poor form level (F-), which agrees in sign with the number of drawings which are increased in size. The interpretation of this factor is assisted by the Rorschach form level category. It appears to be described as expansive and careless behavior. The reverse of this, number of drawings with decreased size would be described as constricted, careful, anxious behavior.

e. Factor 5. Rorschach productivity with the use of whole card, human and animal movement. This factor contains the number of human movement responses (M), the number of populars (P), the number of animal movement responses (FM) and the number of whole responses (W). Also, the number of rejections has a negative loading on this factor. Besides interpreting this factor as a productivity factor (the more responses, the higher the possible correlation between number of whole responses, M, FM, and P), some comparison must be made between this factor and factor 1, also a productivity factor, but one composed of a different response style on the Rorschach. Factor 5 is the idealized Rorschach. Human and animal movement responses are interpreted by Klopfer and Piotrowski as belonging to children who are free, easy, and verbal. The number of human movement responses is not expected to be particularly high in 7 year olds, so that when this pattern is seen, it is also interpreted as a sign of maturity (especially, empathy). However without going beyond the data this factor is called productivity with the use of whole card responses.

f. Factor 6. Poor Rorschach performance with visual motor and perceptual difficulties. The two cluster variables in this factor are negative loadings of poor form level (F-), and the number of color-form responses. Moderate negative loadings on Bender rotations and increased number of units appear as well. In addition a positive loading of WISC Block Design and the use of large details on the Rorschach also occur. This is a poor Rorschach performance, response with only minimal attention to the characteristics of the card and a performance in which the card colors are used simply because they are noticeable, not because they add anything to the response. The poor Bender with rotations and too large reproductions of the design also suggest a lack of control of the test situation. The opposite loading of Block Design and large D on the Rorschach suggest that this is a perceptual problem since the boys who produced such patterns could not manage the Rorschach stimuli well enough to use the most characteristic aspects of the cards - the large detail responses. This factor, therefore, appears to reflect very poor Rorschach performance with visual motor and perceptual problems.

g. Factor 7. Poor Rorschach form level with perceptual-motor difficulties. This factor is similar to factor 6. The cluster contains negative loadings of closure deviations and a positive loading of color-form (CF) on the Rorschach. Also appearing in this factor are moderately high negative loadings on use of unusual detail, poor form level on the Rorschach and rotations on the Bender. Here again is poor conceptualizing on the Rorschach produced by a boy who does not respond to the cards, but in this case, form is the only characteristic to which he responds since he ignores even a primitive use of color in the color-form pattern. Incomplete designs which are frequently rotated characterize his Bender protocol. This is poor form level on the Rorschach with perceptual-motor difficulties. It is a pattern which is similar to factor 6 except that form is the principal determinant of the Rorschach responses.

2. Results of the factor analysis of psychologist test data for 2nd grade girls

a. Rorschach productivity with the use of details. The cluster of variables describing this factor are the Rorschach scoring categories number of small details, (d), the number of unusual details and white space (Dd and S), the number of large details (D) and the number of responses with poor form level (F-). In addition, the number of responses which were determined by the use of form-color (FC) is also loaded on this factor. This factor appears to be a productivity factor without the use of the whole card. The child's orientation is one of picking details, both large and small, and ignoring the overall characteristics of the card. This factor is interpreted as being more negative than the first factor extracted in the sample of 2nd grade boys since no or few human movement responses were given. One gets the impression that with the use of small and large details, and the poor form level, girls with this pattern are driven to produce something as a response without regard to quality, and have productivity as a primary goal. A talkative child with nothing to say might be hypothesised.

b. Factor 2. Immature intellectual development and poor visual motor control. Three variables form the cluster in this factor. They are the number of curvature deviations on the Bender, the number of figures with deviations on pointed or curved sub-parts, and a negative loading on the WISC Block Design scaled score. In addition to the principal cluster variables, three of the four remaining WISC sub-tests, Information, Comprehension and Picture Completion are also negatively loaded on this factor. A final variable, the number of Rorschach responses which use animal movement concepts (FM) is also negatively loaded on this factor. In 2nd grade boys, factor three which was made up of curvature deviations on the Bender was interpreted as age and motor control primarily. This factor in 2nd grade girls which also contains the mental ability variables appears to be one best described as immature intellectual development and poor motor control. In other words, in 2nd grade boys the comparable factor, factor 3 appears to be a developmental lag, while in girls this factor seems to be a mental age variable.

c. Factor 3. Rorschach productivity with the use of whole card and human and animal movement. The group of variables defining this cluster are number of human movement responses on the Rorschach (M), the number of responses with color-form (CF), the number of animal responses (FM) with additional loadings on the use of whole card in responses (W), and the number of responses with form-color (FC). This pattern is one of productivity and can be compared to factor 1. The response style, just as in the case of 2nd grade boys, is one which uses the whole card rather than details. In the case of girls, factor 3 is defined by variables (M and FM) which are usually given a positive interpretation. Such Rorschach patterns are interpreted in 7 and 8 year olds as easy, verbal, and mature - the idealized Rorschach. Since it is difficult to give a great number of responses with W to the 10 Rorschach stimuli, this productivity factor is different from factor 1. In factor 1, the use of the innumerable detail possibilities implies a girl who is giving responses for the sake of responding with little attention to the quality of response (poor form level) while factor 3 represents carefully selected responses with a good conceptual quality. Production of good W is traditionally assumed to reflect a synthesizing ability.

d. Factor 4. Verbal ability with aspects of compliancy and accuracy. Factor 4 is made up of the WISC sub-tests with the exclusion of Block Design. As in the case of 2nd grade boys' factor 2, Block Design does not appear on this factor probably because of the lack of "bottom" on the test. The main variables defining the cluster are Similarities, Information, and Picture Completion with an additional positive loading of Comprehension and also negative loadings of the number of figure decreases in size on the Bender and the number of drawings with rotations. Even though there are no Rorschach variables on this factor, the fact that the Bender variables which are included represent accuracy and attention to detail in reproducing the designs, lends support to interpreting this factor (as it was interpreted in factor 2 in the case of 2nd grade boys) as one of verbal ability with aspects of compliancy and accuracy.

e. Factor 5. Poor visual motor control and lagging development. Only two variables describe this factor. They are the number of drawings with deviations in angulation on the Bender and the number of drawings with deviations in closure. This factor appears to be most like factor 3 in the sample of 2nd grade boys: perceptual difficulties, reflecting age and motor control.

f. Factor 6. Rorschach popular responses. The main variable describing this factor is the number of popular responses to the Rorschach. Since the number of whole card responses has a negative loading on this factor, the popular responses must be mostly large details. Also this pattern of response does not include any card rejections , implying a compliant, and "doing what is asked" attitude. The fact that no other Rorschach scoring determinants are included in this factor suggests that these girls give only popular responses, do the minimum of what is required, but risk nothing by not venturing forth with any other type of response.

3. Results of the factor analysis of psychologist test data for 5th grade boys.

a. Factor 1. Intelligence and verbal ability. The cluster variables in this factor are the WISC sub-tests: Similarities, Information, Picture Completion and Block Design. Also loaded significantly on this factor are WISC Comprehension, the number of whole card responses on the Rorschach (W), and the number of animal movement responses (FM). The number of Rorschach card rejections has a negative loading on this factor. This factor is easily interpreted as intelligence and verbal ability. The fact that the use of the whole card (W) and animal movement responses (FM) on the Rorschach are also loaded on this factor suggests that the intelligence reflects in this factor is integrative and lively.

b. Factor 2. Rorschach productivity with the use of details. In factor 2 the Rorschach response style of the use of details, both large, small and unusual occurs again in the sample of 5th grade boys. No movement responses (M or FM) appear in this factor and the main determinant for the Rorschach responses is form with the use of color (FC and CF) and also poor form level (F-). Such a pattern suggests Rorschach productivity which for a 10 and 11 year old boy is sterile and compulsive - the giving of responses only for the sake of responding and occasionally without attention to the appropriateness or accuracy of the response. Such responses belong to extroverted behavior since only the obvious aspects of the Rorschach cards are being responded to. In contrast an introverted Rorschach pattern would be one in which a boy would have to add something to the stimulus which cannot be directly observed, such as human or animal movement.

c. Factor 3. Perceptual difficulties with lack of visual motor control. Factor 3 is a cluster of variables reflecting design errors on the Bender. Here, as in the case of both 2nd grade boys and girls, curvature deviations, pointed or curved sub-part deviation and deviations in angulation appear together. Since there are no WISC subtests loaded on this factor as there were in the case of 2nd grade girls, this factor does not appear to reflect intelligence. It is probably best interpreted as motor control. However, the interpretation of perceptual difficulties which was not assigned to Factor 3 in the 2nd grade boys' sample or Factor 2 in the sample of 2nd grade girls, may be assigned to this factor with a little more security. This is because the development of motor control should be fairly well established at the 10 and 11 year level, so deviations at this age are more significant than they were earlier.

d. Factor 4. Rorschach productivity with the use of whole card, human and animal movement. The number of human movement responses (M), animal movement (FM) and use of the whole Rorschach card (W) are the variables describing this factor. Here again productivity is implied though a different type than in Factor 2. These boys add something to the card by attaching movement to their responses. Since only the main Rorschach determinants were used in this factor analysis, additional use of color may have also been involved in the response, but would not have appeared among the variables. Good form level is implied in the M or FM score. This pattern is interpreted usually as introverted or creative productivity, and given a more positive value than the productivity demonstrated by the pattern occurring in Factor 2. Some aspects of awareness of the environment can be inferred from the moderate loading of populars.

e. Factor 5. Too large vs too small Bender figures. Size deviations on the Bender appear in this factor. The number of figures increased in size and number of figures decreased in size both appear with opposite signs. Thus a boy who makes his designs larger than the stimulus never makes them smaller and vice versa. Drawings that are too small have been interpreted by Clawson (1962), Koppitz (1959) and Hutt (1960) as a sign of anxiety; too large drawings are usually given the interpretation of uncontrolled expansiveness.

f. Factor 6. Rorschach popular responses. This factor is defined primarily by two variables, the use of large details (D) and the absence of responses with color-form (CF). In addition, moderately high loadings of Rorschach populars (P) and a negative loading of whole card responses (W) also appears. Bender designs with decreased number of units and designs with rotations also appear here with negative loadings. What these variables suggest is a boy who gives all of the popular responses which use the large details and none of those which require the use of the whole card. In addition, a boy whose Rorschach is produced in this way does not rotate any of the Bender designs, nor does he make any errors in the number of units in the drawings. This along with the Rorschach pattern is interpreted as conformity, compliancy and accuracy with a minimum of originality and spontaneity.

g. Factor 7. Careless Bender with both too large and too small reproductions. In this factor, inaccuracies in the Bender design are the primary variables. Drawings with both increased number of units and decreased number of units appear. In addition, there are no drawing rotations since this variable has a negative loading on the factor and the number of Rorschach populars is also loaded positively on the dimension. This pattern on the Bender is careless and reflects a lack of concern about the task.

4. Results of the factor analysis of psychologist test data for 5th grade girls.

a. Factor 1. Rorschach productivity with the use of details. All of the Rorschach scoring categories appear in this factor. The cluster is defined by the number of unusual and space detail (Dd and S), the use of form-color (FC) and the use of color-form (CF), along with poor form level (F-). The remainder of the location responses and the determinants are also positively loaded on this factor; however, unusual and space detail (Dd and S), color-form (CF), and poor form level appear only in this factor and in none of the factors which follow. This factor is obviously Rorschach productivity. The cluster variables suggest that this productivity is often without judgment, or that the type of girl whose record matches this pattern is one in class who is always throwing up her hand to answer any question the teacher asks regardless of whether she is sure of the correct response. (the "contributor.")

b. Factor 2. Immature intellectual development and poor visual motor control. The number of curvature deviations on the Bender and the number of drawings with pointed or curved sub-parts appears in this cluster of Factor 2. This factor is comparable to Factor 3 for both 2nd grade boys and 5th grade boys and Factor 2 for 2nd grade girls. In addition, Picture Completion and Block Design receive negative loadings on this factor. Motor control with mental age is implied in this factor. It is interesting that in the samples of both 2nd and 5th grade girls, curvature deviations appear with WISC subtest scores, but they do not appear with WISC subtest scores in either sample of boys. Evidently, motor control as implied in inability to manage the curves and angles on the Bender is related to intelligence level in girls, but not in boys. Since Picture Completion and Block Design are the two WISC subtests in the factor for 5th grade girls, this factor may also be interpreted primarily as a perceptual factor, since perceptual difficulties also may have accounted for the low Picture Completion and Block Design scores. If the other WISC subtests had appeared on this factor, the interpretation of motor control with intelligence would have been the most obvious one.

c. Factor 3. Intelligence and verbal ability. The WISC subtests: Information, Comprehension and Similarities, are the three variables with positive loading in this factor cluster. The remaining variable which defines the cluster is loaded negatively and is the number of card rejections on the Rorschach. In addition, high positive loadings are found in this factor for Picture Completion, number of whole card responses (W), number of animal movement responses (FM), and a negative loading on the number of Bender drawings with rotations. This pattern is interpreted as verbal ability, willingness to respond, and accuracy. The use of whole card and animal movement on the Rorschach suggest a girl willing to put more than the obvious into the Rorschach responses and to integrate concepts well enough to use the entire stimulus.

d. Factor 4. Rorschach productivity with the use of whole card and human movement and Bender inaccuracies. The use of the whole card on the Rorschach (W) and human movement responses (M) have positive loadings in this factor cluster. In addition, the number of small details (d) is found with a negative loading. Other variables loaded on this factor are the number of Bender drawings with increased size, the number of Bender drawings with immature responses (dashes, circles or loops for dots), both with a positive loading, and a negative loading for the number of Bender drawings with increased number of units. The Rorschach whole card and human movement responses appear here without loadings of intelligence. The number of Bender designs with size increases and number with immature types of response suggest an expansive, rather inaccurate girl who is willing to project on the Rorschach cards. The larger Bender drawings and whole card responses which appear together suggest that the whole card responses are of less good quality than those in Factor 3 above and one might infer from the pattern of variables which are represented a manic quality.

e. Factor 5. Bender drawings decreased in size and poor visual control. Bender designs with decreased number of units and decreased size are the two primary variables in this cluster. Also, deviations in angulation have a moderately positive loading, while number of drawings increased in size has a negative loading. A Bender protocol with small drawings, often with fewer than the number of units in the stimulus card suggest a withdrawing, "closed in," restricted girl (Koppitz, 1959), who may not make larger drawings or complete them because of difficulty in motor control, the latter being suggested by the evidence of difficulties in angulation.

g. Factor 6. Rorschach popular responses. This factor cluster contains the number of populars (P) and the number of large detail responses (D). In 5th grade boys, Factor 6 was defined by populars and large details. In order to get such a Rorschach pattern without loadings of other scoring categories, these protocols would have to be characterized by the child giving all of the populars which belong to the large details. The girl who responds to the Rorschach in this way is one who is careful and who makes only the safest responses. Also there is a lack of compliancy in that only a minimal performance is given. No risks are taken to attach any meaning or interpretation to the stimulus other than what is patently obvious.

h. Factor 7. Bender drawings increased in size and poor visual motor control. Increased number of units and drawings with increased size on the Bender are the two variables in this factor cluster. In addition, positive loadings of drawings with immature responses, deviations in rotation and deviations in angulation are also found along with a negative loading of the number of Rorschach responses with color-form (CF). This is a visual motor factor from the Bender. The characteristics of it are large perseverating designs, often with immature responses, and deviations in rotation. It is a visual-motor factor without intelligence as is Factor 5 above. The interpretation seems to be one of expansive behavior being overwhelmed by the task as well as a lack of control in making the Bender protocol consistent with the stimulus. This is another type of perceptual or visual motor factor without loadings of WISC variables.

H. Results of the factor analysis of psychologist's observational and qualitative judgments

Twenty seven variables were included in this analysis. The first five are the psychologist's judgments of the child's general attitude toward the examination session. These judgments were scored as "0" not present, "1" present and "2" present to a marked degree. In the case of these variables, but not in the case of those which remain, a higher score indicates positive response to the test situation and is indicative of potentially good school adjustment. Concentration, control, frustration tolerance, conforming behavior and relaxed are these five variables grouped under the heading "clinical impression." The next four variables rate the pupil's attitude toward the examiner. Hopefully, such attitudes might be indicative of a pupil's attitude toward the classroom teacher since the tasks the psychologist asks the pupil to perform may be similar to those which his teacher asks of him.

Seven additional variables describe the child's reaction to the tests specifically. Impulsiveness, giving up, persistence, attention and concentration difficulties and so forth are typical of some pupils in responding to the demands of the psychological examination. These seven variables and the five described above are scored as "0" not present, "1" present, and "2" present to a marked degree. The means and standard deviations for all of these observational judgments can be found on Table 13.

The final group of variables included in this analysis is composed of the 11 qualitative judgments which the psychologist made by ranking every pupil with respect to one another taking each rating singly. These were judged on a five point scale from 1, good adjustment to 5, poor adjustment. Means and standard deviations for these ratings can also be found on Table 13.

The correlations between all of these variables are presented in four tables, one for each sample, and are found on Tables 14, 15, 16, and 17. Finally the factored dimensions and the coefficients of each variable on the dimensions are presented in Table 18. Since there are no previous factor studies of test behavior, the description of the factors which were extracted and the labels which are applied to them are presented, generally, as operational definitions.

Reviewing the factor loadings on each of the factors in this set of data, it is imperative to keep in mind the direction of the distribution for each of the variables. For example, variables one through five under the heading Clinical Impression were rated in the direction of favorable response during the interview, zero being assigned when the child manifested no evidence of cooperation, good control, frustration tolerance and so forth. A rating of two was assigned to those pupils who manifested such behavior to a noticeable degree. High scores on these variables are in a positive direction, while low scores are in a negative direction and these variables are expected to correlate negatively with other indices of poor school adjustment. The remainder of the variables require rating in the opposite direction to the first five. the higher the score on variables from 6 through 27, the more negative the behavior. The qualitative ratings (variables 17 through 27) made by the psychologist were designed so that a rating of one was given to those pupils with the most adequate behavior in the dimension being rated and a rating of five assigned to the child with the least adequate behavior. Ratings of two, three and four were given to children who fell between the extremes. Variables 6 through 27 are expected, therefore, to correlate positively with one another and with other indices of school adjustment. The following the the interpretations of the factors from this analysis:

1. Results of the factor analysis of psychologist's observational and qualitative judgments on 2nd grade boys.

a. Factor 1. Intellectual functioning and achievement. The principal variables in this factor are the psychologist's ratings of intellectual functioning, WISC performance, and estimated achievement in school. In addition, the observations of test behavior which are loaded on this factor are "giving up" and "attention and concentration difficulties." While the cluster is composed of intellectual functioning and achievement judgments primarily, all of the psychologist's qualitative judgments are also moderately loaded on this dimension. The interpretation of this factor is that it is a measure of intellectual functioning and its application and that these variables underlie all of the psychological qualitative judgments.

b. Factor 2. Immaturity and personality constriction. This factor apparently is related to the child's performance on the Rorschach. The main variables are overall evaluation of the Rorschach performance, Rorschach responses which indicate a child with personality disturbance, lack of creative potential and possible school adjustment difficulties. In addition, the child's behavior during the testing was characterized by a lack of cooperation, non-conformity, nervousness, brashness and defensiveness. Also the psychologists estimated that such pupils would have difficulties with classroom teachers, and their evaluations of the performance of the Bender Gestalt Test are loaded on this factor. These variables suggest an interpretation of perceptual and motor difficulties along with personality constriction and reflect immaturity. At 2nd grade the poor Bender performance may reflect developmental rather than perceptual problems.

c. Factor 3. Self control. The variables describing this factor are those having to do mainly with control and frustration tolerance during the test administration. Good control, good frustration tolerance and conforming behavior are combined with a negative loading of excessive reactions to success and failure. In addition, inability to relax, brashness, impulsiveness and personal references in relation to the test materials are also loaded negatively on this factor. Self control during the test situation appears to be the best interpretation of this factor.

d. Factor 4. Perceptual difficulties with poor visual-motor ability. Factor 4 contains the two qualitative judgments related to performance on the Bender Gestalt Test - evidence of perceptual difficulties (variable 18) and overall rating of the Bender (variable 26). The criteria for variable 18 also contained inferences about the child's perceptual acuity from his Rorschach performance. The interpretation of this factor is perceptual difficulties resulting in poor visual motor ability.

2. Results of the factor analysis of psychologist's observational and qualitative judgments on 2nd grade girls.

a. Factor 1. Intellectual functioning and its application. With only one or two exceptions this factor contains the same variables as Factor 1 for 2nd grade boys. The principal variables defiming the factor for 2nd grade girls are ratings of poor intellectual functioning, poor overall performance on the WISC, low estimated school achievement and the inability to meet learning tasks effectively. In addition to the presence of "giving up" and "attention and concentration difficulties," good control was not found to be present in cases of girls with high ratings (most negative) on the variables related to this factor. The interpretation of this factor seems to be quite obviously intellectual functioning and its application. Girls rated as having poor intellectual functioning are also noted to be those with a lack of good control, those who give up on test items and ones who have attention and concentration difficulties.

b. Factor 2. Inappropriate behavior during testing. Brashness, over-impulsiveness, personal references, and attention and concentration difficulties are the principal variables in this cluster. In addition, the variables with ratings of a lack of good control, poor frustration tolerance and non-conforming behavior are also loaded on this factor. The interpretation of this factor seems to be one of distractible, egocentric, self-centered behavior, a lack of self control and an inability to persist at the testing task. Inappropriate behavior during testing appears to be an appropriate label for this factor.

c. Factor 3. Immaturity, personality constriction and visual-motor difficulties. Factor 3 for the sample of 2nd grade girls is comparable to factor 2 for 2nd grade boys. The variables defining this factor are those related to Rorschach performance, ratings of creative potential, and poor school adjustment. In addition to the main variables in the cluster, ratings of an absence of relaxed behavior during testing, shyness, predictions of problems with the classroom teacher and ratings of poor performance on the Bender are also loaded on this factor. The interpretation of this factor seems to be one of constricted, immature behavior along with perceptual difficulties.

3. Results of the factor analysis of psychologist's observational and qualitative judgments on 5th grade boys.

a. Factor 1. Intellectual functioning and its application. The cluster of variables defining this factor are psychologist's ratings of intellectual functioning, performance on the WISC, estimated school achievement and ability to meet learning tasks effectively. In addition, observations during the testing situation of "giving up" are also negatively loaded on this factor. The remainder of the psychologist's qualitative judgments have a moderate loading on this factor suggesting that major variables underlying psychological judgment are intellectual functioning and its application.

b. Factor 2. Immaturity, personality constriction and visual-motor difficulties. The ratings of the Rorschach and Bender performance are the principal variables in this factor cluster. Overall Rorschach and Bender performance, evidence of perceptual difficulties and predicted personality problems are the cluster variables. One other variable loaded on this factor is the psychologist's ratings of creative potential, an estimated lack of creative potential being correlated with perceptual difficulties and personality problems. The interpretation of this factor appears to be personality constriction and immaturity with perceptual difficulties and visual-motor problems.

c. Factor 3. Distractibility and a lack of self control. Brashness, personal reference, impulsiveness, and a lack of good control, are the variables defining this factor. Psychologist's observations of a lack of frustration tolerance, non-conforming behavior and defensiveness are also loaded on this factor. The variables in this factor lend themselves to an interpretation of distractible, impulsive, acting out behavior with the suggestion of immaturity and lack of self control.

d. Factor 4. Inappropriate behavior during testing. The principal variables in this factor are blocking, giving up, poor frustration tolerance, attention and concentration difficulties, and an absence of relaxed behavior during the interview. Boys with this pattern withdraw from the task and their behavior is inappropriate to the demands of the situation.

4. Results of the factor analysis of psychologist's observational and qualitative judgments on 5th grade girls

a. Factor 1. Intellectual functioning and its application. Psychologist's ratings of intellectual functioning, performance on the WISC, estimated school achievement, and the ability to meet learning tasks effectively are the primary variables on this factor. In addition, dependency, giving up, attention and concentration difficulties, and blocking as well as the remainder of the psychologist's qualitative judgments are also loaded significant on this factor. Intellectual functioning and its application is the best interpretation of this factor. In 5th grade girls rated as poor in these attributes, dependency, giving up, attention and concentration difficulties and blocking are also not evident during the testing situation.

b. Factor 2. Inappropriate behavior during testing. Giving up and blocking are the two variables defining this cluster. Also loaded on this factor are a lack of cooperativeness, defensiveness, attention and concentration difficulties and a lack of relaxation during the interview. The interpretation of this factor appears to be failure oriented, defeatist and uncooperative behavior during the test setting, or generally inappropriate behavior during testing.

c. Factor 3. Self control. Good control and frustration tolerance are the variables in this factor cluster. In addition, estimated poor school achievement and problems related to the classroom teacher are also loaded negatively in this dimension. The interpretation of this factor is one of poor control and acting out behavior which might be present during class and also related to poor school achievement. Poor self control appears to be the underlying variable.

d. Factor 4. Immaturity and personality constriction. The ratings of an absence of relaxed behavior, shyness, dependency, impulsiveness, attention and concentration difficulties and overall rating of poor Rorschach performance are the variables in this cluster. In addition, overreactions to success and failure, and personal references during the test administration are also loaded on this factor.

The interpretation which seems most indicated is one of immaturity, constriction, and distractibility during the test administration.

e. Factor 5. Visual-motor and perceptual difficulties. The variables which required ratings of the child's performance on the Bender are the two which are involved in this factor. The additional variable with a moderate loading on this factor is the observation of brashness during the testing situation. Perceptual-motor difficulties with poor impulse control is the interpretation suggested by these variables.

I. Summary of the results of factor analysis of psychologist's objective test data

Several factors emerged in each set of data that were common to every sample. For example, a verbal ability factor occurred in all groups on which was loaded the WISC subtest scores. Three Rorschach factors appeared also. Without a very careful review of case data in the light of the results of the factor analysis only the most obvious interpretations of these factors are attempted here. Two types of Rorschach productivity were evident. The first was Rorschach productivity with the use of large, small and unusual details. The determinants which were loaded on this factor were in general the form-color (FC) or color-form (CF) group. No human or animal movement responses occurred in Rorschach with this type of productivity. The second type of Rorschach productivity was one characterized by the use of the whole card and human and animal movement responses. In the latter type of record the child must "put something" of himself into his response. Such responses are usually interpreted as mature, empathic, and introverted. Frequently this type of record in children is said to indicate above average intellectual development.

A fourth factor which was common to all samples except for 2nd grade boys was a factor which involved the number of popular responses (P) and the use of large details (D). Such a pattern would occur in the Rorschach record of a child who "saw" all of the populars which the large detail areas of the Rorschach card. If a Rorschach protocol contained only the use of the large detail populars and only a few other responses, the psychologist would interpret such a record as belonging to a child who gave only what he was very sure of, who was not likely to venture forth into the unknown, or who "escaped" from the testing situation with only a minimal performance.

In both samples of girls a factor occurred on which was loaded Bender curvature and angulation deviations and intelligence test variables. This factor reflects perceptual difficulties manifest in visual-motor control. Because of the loadings of the WISC subtests on the factor it was interpreted as poor visual-motor control and immature intellectual development. However, in the samples of 2nd and 5th grade boys, the factor which contained loadings of Bender deviations of this type did not contain loadings of intelligence test variables. Thus we may infer that perceptual-motor difficulties manifest in poor visual- motor control may be related to intellectual development in girls, but not directly related to intelligence in the case of boys.

A second type of Bender factor also appeared in each sample. This factor dimension contained the variables reflecting Bender size deviations - either too large or too small drawings. In each separate sample other variables were loaded in such a way that a generalization covering all groups is somewhat difficult. Nevertheless, this Bender pattern has been interpreted as expansive, uncontrolled behavior (too large drawings) or as withdrawn and constricted (too small drawings). In either case it reflects an inability to attend to the testing task or perform accurately and the factor must be interpreted in the light of the additional variables which appear in that dimension in each sample.

The remaining factors are specific to each group and can be examined by referring to the results of the analyses presented previously.

J. Summary of the results of the factor analyses of psychologist's observations and qualitative judgments

Four factors were derived from each factor analysis of the psychologist's observations during the testing situation and the inferences made about the child's intellectual, creative, affective, and visual-motor strengths and weaknesses. The first factor which emerged in each set of data contained a majority of the qualitative judgments made by the psychologists. The main variables in this dimension were ones which required ratings of the child's intellectual functioning and achievement. This factor in each set of data certainly suggests that one important observation that psychologists are making about the children they see has to do with the quality of the child's intelligence and his ability to use his intellectual resources.

A second factor appeared in all samples also. This dimension contained variables which rated the pupil's performance on the Rorschach and the psychologist's judgments that the child was likely to have personality difficulties. In addition to these variables, this factor often includes the psychologist's ratings of the child's performance on the Bender. One interpretation is that of immature behavior. Another inference from these variables is the presence of personality constriction, fear of new adjustments, and an inability to function in situations where the standards are not clearly set. The observation of perceptual difficulties manifest in visual-motor control on the Bender is also a major variable in this factor dimension. The testing behavior suggested by the other variables in this factor is described by one or more of the following terms - immaturity, personality constriction and visual-motor difficulties.

Two other factors, each measuring some aspect of the child's behavior during testing were the remaining dimensions to be extracted in this analysis. Ratings of self control emerged as a factor in each sample except for the sample of 5th grade boys. A comparable factor for 5th grade boys contained an opposite set of variables and "poor self control" is the label which was applied on Table 4.

The final factor included a variety of behaviors, all of which could be inferred to be inappropriate behavior during the testing situation. Some examples of such behavior are blocking, giving up, attention and concentration difficulties, personal reference and defensiveness. Differences between boys and girls may be present, but further analysis of individual cases is necessary before these differences can be clearly drawn. For the present, it can be said that girls are more likely to give up on test items or to block while boys are more apt to be brash, nervous and defensive. Attention and concentration difficulties were common to both boys and girls.

Evaluations of intellectual functioning, achievement consistent with sex and age peers, visual-motor ability, good self control and inappropriate behavior during the test situation are the principal dimensions in the discipline of psychologist's observations and judgments of children during psychological examinations.

RESULTS OF THE ANALYSIS OF THE PSYCHIATRIC INTERVIEW

A. Psychiatric interviewing in the school

The psychiatric interview began with the child's introduction to the doctor, either in the school office, from which the two would walk to the examining room, or when the child was brought to the room where the psychiatrist waited. The examining room was furnished with a table upon which the play kit could be displayed, with a few toys exposed, and the rest readily available. Both child size and adult size chairs were available.

The initial contact began with the psychiatrist's asking the child what he knew of the role of the psychiatrist and why he was being seen. Parental interviews with the social worker preceded all contacts with the child, and perhaps half of the children had been examined by the psychologist before the psychiatric interview. Therefore, even the 7 year olds could have had some information as to the study in process. This was explored by the psychiatrist asking "What kind of a doctor am I?" The child was encouraged to guess at this point, and the answers gave some clue as to the child's comprehension, curiosity, and background, as well as to his readiness to verbalize his speculations, and his reality ties.

Most often, the younger children did not know why they were being seen. The explanation then went something like this: "You know that I am a doctor. Well, I'll tell you first the kind of doctor I'm NOT. I'm not the kind of doctor who gives shots or examines teeth or eyes or takes out tonsils. I'm a psychiatrist. Do you know what a psychiatrist is? He is the kind of doctor who is interested in how boys and girls feel -- not how their bodies feel but how they feel inside. Whether they are mostly happy or sad or angry or frightened or worried or troubled. How they feel about themselves and about other people, their teachers and families and friends and so on. How about you? Do you have any troubles or worries or problems?" The child was often offered "help" within the interview. For example, a child who complained of shyness might be told "Let's try together to understand about shyness, and why you're shy." This might involve being realistically supportive and helpful. If such an approach were not indicated, the child was asked to help the psychiatrist understand more about children of his age. The older children, particularly, would be requested to "tell me what you think would be important for me to know, so that I will understand you and other boys and girls your age." There was no attempt to "make problems" for the child. His integrity was respected, and while he was invited to explore various areas of his life, including those in which he had difficulty, the psychiatrist was typically content with the material which the child produced spontaneously. Direct questions, such as "Do you like your mother?" were avoided, as were all leading questions where the child would feel pressured to answer in a socially acceptable way.

From this standard beginning, the rest of the interview tended to differ according to the child's initial responses. Younger children, or extremely inhibited or anxious children, would be assured that there was no need to talk, and they could work or play with the "things" in the play kit. These children were urged to find something to do while "getting acquainted." This might have included drawing or playing a game together.

Leads were taken from the child, if he talked freely, as most did. His family constellation, the personalities of his parents, his brothers and sisters, and his likes and dislikes in the home were explored. Frequently, the child was asked what, at home, he would most like to change.

School adjustment, and his relationship to teacher and peers were also explored in some depth. From this, a discussion of his ambitions, and what he would like to do when he grew up, could be introduced. This area served as an excellent lead for evaluating the child's identification with his parents and with the expected male or female role.

Children were asked about any fears, disappointments, troubles, or worries. Those who felt at ease in discussing these areas readily continued the examination in this vein. Some of the more sophisticated older children, in fact, performed with obvious relish, presenting their version of "psychiatric problems" to a sympathetic if unimpressed ear. However, most resistent children were not pushed to respond, and instead less disturbing material was requested, such as a dream they could remember, or possible nightmares. Other specific questions frequently used were requests for the earliest, the happiest and unhappiest memory. Younger children were asked for their "three wishes." Children who drew pictures were asked about their productions, and these served as a focus for conversation.

Besides the more general items noted above, the child was always approached personally, and the obvious mentioned: "How did you get your scar?"; "What a beautiful dress!"; "What's it like to wear braces?"

All of this not only provided specific information, but allowed interaction with the psychiatrist, who placed as much significance on non-verbal as on verbal communication, particularly when the two did not jibe. Thus, bland comments or massive denials of difficulty were noted in conjunction with symptoms such as tics, hyperactivity, or nervous gestures. Or the role-playing older children who recounted their worries fancifully were noted to be roguishly immaginative and free of symptoms. Sudden changes in behavior, following the introduction of new subjects, could be used as a guide to possible difficulties.

In the interviewing room the psychiatrist could sense in relationship to himself whether the child was comfortable or threatened, forthright or defensive, unrestrained or repressed. In the interpersonal relations observed in this setting, as much as in the verbal content elicited during the interview, the psychiatrist could evaluate the child's ability to adjust to his world. As a friendly, understanding, and non-censorious adult who did not become disturbed or retaliatory in the face of any oddities of emotions, speech or behavior displayed by the child, the psychiatrist served two functions. He could not only gain an understanding of the child's level of adjustment, but could offer the interview as an at least mildly therapeutic milieu leaving the child more comfortable than he was before the psychiatric examination.

Psychiatric interviews typically ran for about half an hour. On the whole, this appeared to be adequate for appraisal, and the psychiatrist tended to feel that little more could be accomplished by extending the time to less than a series of interviews.

B. Psychiatric interview schedule

In order to quantify the results of the psychiatric interview as well as to provide a format or framework for their observations, the psychiatrists were asked to rate each child on 24 items making up the psychiatric interview schedule. Enough space was left following each item for identifying descriptive material to be entered. Material entered on this schedule consisted of the working notes from which the final ratings would be made.

The first item covered the extent of the child's understanding of the interview. Responses were coded according to the child's ability to tell the purpose of the psychiatric examination, and were entered on a four point scale of no knowledge, partially correct but limited or distorted knowledge, totally erroneous knowledge, and reasonably correct knowledge. Two other responses, covering "other" (to be filled in) or "insufficient data," allowed for adequate classification of all material gathered. Most of the younger children had very little information about the interview, while the older sample typically had a vague notion of psychiatrists and their work.

The next four items allowed for a classification of general health, size or body build, appropriateness of grooming and dress, and unusual physical characteristics, such as deformities (acne, dental deformities, amputations). These items, and the notes made by the examiner, would serve to recall the child in terms of his appearance.

From this point on, items called for some evaluation of the child's behavior within the interview. These ranged from items called for simple checking, such as hyperactivity versus passivity, to items calling for inferences to be drawn from behavior, for example, estimates of chronic anger or resentment, or sexual identification.

Three items attempted to rate speech, in terms of maturity, specific difficulties, and skill in verbalizing. These items allowed the psychiatrist to check the level of vocabulary, specific problems such as stuttering or articulation difficulties, and ability to talk freely.

The items which followed covered an overall rating of behavior, including gross or serious deviant behavior (severe regression or developmental failure, for example), dominant affect or mood, appropriate maturity, and rebellious versus obedient behavior. These items attempt to capture a measure of general adjustment, covering extreme symptomatology, specific feelings, over-control in the direction of maturity, versus excessively childish behavior, and the extent to which the child could express his own needs within the limits of obedience.

Two more items focused on the relationship within the interview, covering the child's reaction to the psychiatrist, and the psychiatrist's reaction to the child, judged on a continuum from positive to negative. These interacting items attempted to capture something of the child's ability to relate to others, and the kind of reaction which the child would elicit from others. Thus, the psychiatrist was able to note whether the child is comfortable or threatened, forthright or defensive, unrestrained or repressed when around others. He could also judge how these reactions influence others. For example, an immature but sweet and trusting pretty little girl might be much more warmly accepted by the teacher and her peers than an immature, hostile, dirty little boy.

The next two items called for an estimate of the child's intelligence and of correct scholastic achievement in basic subjects. Both these ratings were made on a continuum from low to high, and the latter also allowed for erratic and inconsistent achievement in some children. Ratings of school achievement were somewhat dependent on the child's report of his grades and mastery of school concepts, and the examiner's estimate of the accuracy of this report and its consistency with the estimated intelligence of the child.

Several studies of predictive ratings have indicated that the accuracy predictions can be directly related to the examiner's estimate of confidence in his ratings. Therefore one item called for an estimate of confidence in the data obtained.

Another item called for an estimate of the child's capacity for psychological improvement. Those children who appeared to be disturbed could be rated here according to their ability to profit from help. Naturally, such an item proved to be rather equivocal when rating children considered fairly well adjusted.

A final item called for the checking or listing of all observable symptoms, such as tics, nail biting, hyperactivity, fearfulness, and others. The total number of such symptoms could then be obtained to indicate the number as well as the kind of symptoms characterizing each child.

C. Psychiatric observational judgments and their criteria

The following observations were made by the psychiatrists during their interviews with the children. These are the major portion of the observational data suggested by the Department of Psychiatry of the University of California at Los Angeles in their child psychiatry project. The list includes samples of behavior which can readily be evaluated during the interview or immediately afterwards. The list of specific observations and their criteria follows. The reader will note that many of these behavior characteristics overlap and cannot be considered as discrete aspects of observation.

1. healthy vs unhealthy
   healthy: peppy, active, energetic, strong, good color, full of verve
   unhealthy: weak, pale, fatigued, sluggish; clumsy, strabismus, hearing problems; asthma, eczema; stuttering; poor coordination
   A child would be rated as unhealthy when his functioning is definitely affected by such factors.

2. unusual physical characteristics (present or absent)
   In general terms blemished, birthmarks, stage of sexual development; unusual build, (fat vs thin, tall vs short); teeth deformities; unusual hair or coloring.
   The presence of unusual physical characteristics would be noted for a child who markedly differs from his peers through one of the above factors to a point that his functioning is likely to be affected.

3. hyperactive vs passive
   hyperactive: restless, short attention span, hyperkinesis, agitation, gesticulation, impulsiveness, shifting ideas, rapid speech.
   passive: reticence, lacking spontaneity, overcontrolled, sluggish, docile, amenable, pliant, inhibited

4. anger and resentment (much demonstrated, some evident, none evident)
   When this behavior was rated, the psychiatrist noted critical, jealous, complaining, bitter behavior, long standing grudges, tantrums, lying and deception and distructive characteristics.
   The absence of this trait would be noted in cases of understanding, insightful, empathic, transient complaining, good natured, cheerful, perhaps even repressed behavior.

5. inappropriate vs appropriate sexual identification
   inappropriate: wants to be someone else, plays with cosmetics in toy kit (boy),tomboy, effeminate, aggressiveness in girls, passivity in boys.
   appropriate: girls talk of female roles and goals, boys talk of male roles and goals; warm attachment to parent of same sex; identification with plus admiration of parent.

6. advanced vs retarded speech
   advanced: clear, well-enunciated, speech; highly verbal, large vocabulary
   retarded: lisp, slurred enunciation, omissions and substitutions, baby talk, infantile speech, primitive levels of speech.

7. child's skill at verbalizing
   This trait was rated by psychiatrists from a) talks not at all, to b) talks about things in an indirect or restricted way, to c) talks freely.

8. grown-up vs childish behavior
   grown-up: secure, self confident, age-appropriate behavior and thoughtful
   childish: immature, demanding, low frustration tolerance, much self reference, suck thumb, weepy.

9. obedient vs rebellious
   obedient: conforming, responsible, conscientious, controlled, quick to follow

implied instructions; respectful, grateful, admiring. Clinging vine, trusting, docile, shy, spineless meek.

rebellious: disguised aggressiveness, doesn't like school or rules, s/ubborn, rages, antagonistic, hostile, independent, selfish, boastful.

10. child's reaction to psychiatrist (on a five point scale from strongly positive to strongly negative)
    strongly positive: friendly, at ease, warm, reserved, empathic
    strongly negative : anaclitic, parasitic, possessive, exploitive, agape

11. psychiatrist's reaction to child (one a five point scale from strongly positive to strongly negative).
    strongly positive: a charmer, little princess, senses adult needs, smoothly verbalizes middle class standards, balance between self interest and interest in others, not a prig, able to stand up for self, yet thoughtful, tries to please, sunny cheerful, bright, alert, independent, friendly.
    strongly negative: provocative, demanding, exploitive, possessive, parasitic, instrusive, infantile, hostile.

12. above average to below average intelligence
    above average: bright, verbal, curious, insightful, well-rounded, range of ideas, logical, impersonal, practical, precocious, wide interests, rich fantasies, well-rounded vocabulary.
    below average: dull, immature, concrete, distractible, impoverished, limited.

13. outstanding to failing school achievement
    outstanding: bright, curious, ambitious, loves to read, motivated, wide interests, high grades, loves school
    failing: reading disability, has failed, preoccupied with worries, restless, distractible, acts out, negative, infantile, poor grades.

14. psychiatrist's confidence that judgments are accurate vs inaccurate
    accurate judgment: sharp, clear patterns of behavior; child verbalizes readily, does not withhold, shows clear diagnostic signs or an absence of any diagnostic sign; an example of clearly anxious, fearful or hostile behavior vs an example of clearly bright, achieving, and without problems.
    inaccurate judgment: vague, withholding, inconfiding, mildly suspicious or apprehensive, seems brighter than gives out, seems preoccupied but doesn't tell about himself, mixed symptoms, not too bright or too achieving, confused picture from available information.

15. great to poor capacity for psychological improvement
    great capacity: parental attitudes most crucial, anxious, dissatisfied with self, and ready for change, intelligent, reasonable, relates well and would be a good prospect for therapy if problem develop.
    poor capacity: developmental lag, organic deficiency, psychological rigidity, low socio-economic status, too narcissistic

to attach to others, indirect satisfaction from symptoms, frustrating home environment, irreparable loss, character problems not easily molded.

16. number of symptoms observed.
In this rating the psychiatrist simply noted any symptoms which appeared during the interview. The check list included the following items: nail biting, tics, speech disorders, posture, mannerisms, compulsivity, fearfulness, awkwardness, hyperactivity, restlessness, distractibility, impaired attention, accident proneness, others.

D. Psychiatrist's qualitative judgments and their criteria

Following the 23 items summarized above, the psychiatrist rated each child on a five point scale from prediction of good adjustment to poor adjustment (1 to 5) on seven different items requiring a more qualitative or subjective (rather than a quantitative or objective) rating. The psychiatrist was requested to place at least one name in each of the five steps from excellent to very poor adjustment. Beyond this degree of forcing, which appeared defensible since the pupils were sampled from all levels of school adjustment, there was no requirement for distributing the children seen in a normal or any other a priori distribution.

The interview was initially summarized and coded on the Interview Schedule where specific physical characteristics such as height, weight and grooming, and behavioral aspects such as quality of verbalization or expression of hostility, could be rated. These ratings plus additional notes about the child proved helpful to the psychiatrist when the qualitative judgments were to be made.

The initial step in making the qualitative judgments involved an overall or implicit "averaging" of the children seen, and a search for a key "best" and "worst" child who could serve as prototypes for extreme ratings. With these as base lines, a ranking of all the children could be made.

The following lists the qualitative judgments made by psychiatrists for 2nd and 5th grades and the criteria for each rating. These criteria statements were developed by summarizing the criteria each psychiatrist used in making each rating. The criteria used in rating the project pupils were remarkably comparable from clinician to clinician; thus the clinical process can be replicated by the use of the study procedures as well as the following criteria for psychiatric qualitative judgments.

1. Criteria for psychiatric qualitative judgments 2nd grade boys and girls

a. This child is comfortable with himself. At grade two, the child who is comfortable with himself is one who can accept his own feelings and impulses, and release them in a manner acceptable for his age. He has at least a beginning sense of some accomplishment, such as reading skill. His ability to face adversity is adequate. He has a growing sense of self. His modd is pleasant, and he is not plagued by feelings of inferiority, depression, inadequacy, or hostility.

Rating (1) best or most adequate in this dimension of children seen.
Happy and confident; comfortable, at ease, secure; open and frank, friendly, responsive, outgoing; poised, sense of humor, sense of self; sets goals, challenged, learns easily, insightful; accomplished, belongs, a "princess;" creative, confident, businesslike; free and non-constricted.

Rating (2) slightly defiant, but controlled.
Tends to manipulate to get pleasure, a bit devilish; denial; bright, serious, objective, questioning, an underlying touch of depression; somewhat emotional; seeks extra attention; enjoys family teasing; enjoys being

just "pretty good" in reading.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Compensating but mastering; well defended; wards off depression; dissatisfied with self; tense; conventional aims; insecure, doesn't know how he is doing in school; loves school ,reads well, but a nail biter; rather dull, lacks comprehension, but friendly; pleasant, shy; scared, competitive; claims friends; denial about divorce problems in family; retained in 1st grade but doing better; difficulty in talking; doesn't like to play, tense over brothers' teasing.

Rating (4) feels inferior.
Hyperactive but signs of responsibility and honesty; guilty over attention gained from illness; can talk freely about fear of rejection, trying to make best of things; learning block, feels inferior to brother.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Symptoms of inner tension; nail biting, compulsive behavior, self mutilating; anxious, depressed, lonely, sad, shy, fearful, distant, passive, withdrawn, isolated; unattractive and poor self image; unpleasant home; "mother says I can't draw;" parents fight; internalized; pre-psychotic.

In summary, a child rated (1) was happy and confident, at ease, and secure; a (2) rating suggested some slight limitations, such as a need for attention, an underlying depression, or emotionality. An average rating (3) suggested some symptoms compensated for. A rating of (4) suggested some seriously limiting symptoms with some signs of a successful outcome. The (5) rating suggested a defeated, symptom-ridden child.

b. This child is comfortable with others. At grade two, the child who is comfortable with others would be one whose early relationships had served to make him trusting and confident of the good will of others. By the same token, such a child should feel fairly comfortable about himself, and have some concept of how he is accepted by others. The rating is based in large part on the psychiatrist's estimate of how the child relates in the interview. However, the report given by the child of his friends, teachers, siblings and parents would give other areas of relationship which might be evaluated. Thus different reactions to authority figures as compared to peers might be estimated.

Rating (1) best or most adequate in this dimension of children seen.
Spontaneous, friendly, open outgoing; able to relate; loquacious, expressive, comfortable; assertive, yet properly considerate; frank, poised; social success, learns from others, trusting; active, spontaneous, not distructive; outgoing, imaginative; many friends, sociable kind of family, talents; respects others feelings, successful; friendly, bright, confident.

Rating (2) emotionally open, shares deep thoughts.
handsome, achieving, but sometimes bites nails; tells troubles readily, active, gifted, happy child but shoots dart gun at psychiatrist; communicative, concern over parents separation, compensates with school success; ponders mysteries of life, conforming, bright.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Socially acceptable, adjusted; comfortable, relates well; selfish and hedonistic, but well defined; shy, multilingual, hard to communicate; spontaneous, some showing off; exaggerates; a nail biter; honest, friendly, yet makes derogatory comments; quiet, self sufficient, never volunteers; obedient but a slight underlying defiance; friendly, doesn't understand or comprehend; initial anxiety readily overcome; overweight; friendly, seeks attention, worries about his background; a plain sensitive child who communicates well; friendly but preoccupied with others' injuries; protecting self from unhappiness; strict internal standards inhibit relationships; worrisome, intense, overtired.

Rating (4) preoccupied with siblings; tries to provoke hostility by questions.
Critical yet tries to please; overconforming, fears punishment; chatters about troubles, no shame; insecure, projects meanness; fights to rationalize.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Shy, cautious, too obsequious, suspicious; resentful, rebellious, sullen; crazed with rage; stubborn, mute; fears criticism, seclusive, withdrawn, isolated; overcompensates, fears death and wishes for it; hates boys; physically handicapped, bitter; felt rejected by mother and by other children; gives up or gets angry, in a passive-aggressive manner.

In summary, a child who was comfortable with others, trusting, at ease, sure of himself and how others accept him was rated (1). A child rated (2) had less trust of others, or is less confident of his place in their esteem. Children rated (3) were more apt to feel a need to struggle for others' attention, and to question their acceptance. The lower ratings were reserved for children who were unable to relate freely or warmly with others (4), and for those who had severe difficulties in social relationships (5).

c. This is a child with serious learning difficulties. The child having no serious learning difficulties is one who has the advantages of good intellectual endowment plus an environment which has encouraged scholastic achievement, and the absence of emotional problems which drain his ability to concentrate and learn. By 2nd grade children have some concept of their achievement in reading and arithmetic. For example they frequently knew what reading group they are in.

Rating (1) best or most adequate in this dimension of children seen.
Bright, verbal, ambitious; curious, imaginative, motivated; eager, creative, challenged; competitive, a helper, outgoing and extrovertive; obsessive interest in school; compulsive work habits and will to achieve; tremendous vocabulary and wide interests.

Rating (2) uneven application of ability.
Loves school, reads well, but puts too much interest in school, is too preoccupied; good reader, some lag in arithmetic; esoteric interests at the expense of practical ones.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Conforming, responsible; conscientious, controlled, fits in; average

fund of knowledge; disguised aggressiveness would limit achievement; has ability but doesn't like school; anxiety limits ability to concentrate in class; average intelligence.

Rating (4) below average in ability.
Home has not stressed achievement; child feels too pressured to get grades; could not appraise own efforts, likely to progress in the wrong direction.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Sluggish, concrete, dull; highly distractable, can't concentrate on learning; performance less than estimated level of intelligence, has not learned to sublimate or accept frustration of classroom; preoccupied, worried, upset, neurotic, guilty, hostile; regressive, infantile (sucks thumb); stand-offish, stubborn; inhibited, lacks spontaneity; wierd, bizarre, erotic behavior.

In summary, a child rated (1) had considerable ability and could channel it into learning. A child rated (2) had some slight limitation in either of the above. Thus he might be working erratically, doing well in one area at the expense of another. Or excessive preoccupation with school achievement might be limiting his success. A child with an average rating (3) was of average ability and achievement, or doing less well than his good intelligence would suggest because of mild problems. The (4) rating indicated below average ability, or an environmental background which did not encourage school achievement, or emotional problems definitely limiting ability to succeed. A (5) rating was given to children who were disturbed enough to seriously limit their learning.

d. This is a child with serious behavior problems. A child without serious behavior problems is a child whose behavior meets the standards of the school and of the home. Therefore, the extreme ratings stress unacceptable behavior rather than neurotic or immature behavior. A child with no behavior problems, at grade two, is a child who knows how to obtain the attention and approval of others through adaptive behavior. Thus, a bright, achieving child need not win approval in unacceptable ways. A child with an adequate family has models of deportment, a source of satisfaction, and a background of discipline, which would assure his behaving in an appropriate manner.

Rating (1) best or most adequate in this dimension of children seen.
Does not act out; quiet, controlled, placid, contemplative, studious, effeminate; friendly, sociable, hospitable; comfortable conscience; concerned about friends, constructive; friendly, bright and talented; social skills; verbalizes parents' apparently good setting; beautiful "princess," no need to be bad; hostility, bound with love, expressed in good fantasy; compulsive, wards off fear and rage, highly motivated to please; superego and ego syntonic.

Rating (2) not quite as gifted as some.
High standards, under pressure, but bright and creative; physical defect, can take joke; bright, high standards, slightly depressed; withdraws from aggression; can't work out hostility but can reject it; polite, conforming, accepts anger; happy, good student, accepts parents' divorce; realistic, good outlets, not too interested in working.

Rating (3) average, typical, at median level or in-between best and poorest in

this dimension.
Controlled, obedient, conforming; responsible, tractable, liked by peers; compensating -- selfish and homicidal but controlled; withdrawn, afraid, passive-aggressive adjustment; would like to deny but has to conform so only gripes; hyperactive; channels of communication open, convinced that honesty and responsibility pays; identifies with authority; intense neurotic learning problem but has friends; wants to help people and share; preoccupied with protecting self, won't express frustration or hostility; socially anxious; worried about mother remarrying, bites nails, accomplished, heading in socially acceptable direction; exaggerates everything, but close to father, a good model; accepts duty, low socio-economic level.

Rating (4) talks too much, poor models at home, school problems.
Lost in a large family with poor models, guilty and unhappy over poor reading, deprived; fibs about arithmetic, flunked 1st grade, no help at home, building aggression; spends interview playing with cosmetics (boy!), obsessed with them.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Acts out; hyperactive, restless, impulsive, aggressive, rages, hostile, excitable, antagonistic, domineering; impish, stubborn, seductively aggressive and provoking; weak and unstructured, suggestable; poor models, neglected.

In summary, a child without behavior problems was a child who had enough satisfactions in his life so that he did not need to act out his impulses (1). Occasional lapses, were given a (2) rating. The average child (3) had much more variable controls but basically maintained them and showed a steady growth of control. A child who had minimal control for this age was rated (4). The (5) rating was reserved for the youngster who had minimal controls, who openly expressed his anger in an unacceptable manner.

e. This child needs help. This rating perhaps represents the most frequently made judgment of the professional worker: the need for intervention. Children who do not need help are those who have no behavioral or learning problems, and are comfortable with themselves and others. Thus, the previous ratings were to some extent summarized at this point.

Rating (1) best or most adequate in this dimension of children seen.
Happy, self confident, secure, hopeful, a sense of humor, good self concept; relaxed, curious, bright; active, consistent, plastic, relating; playing out his conflict in an acceptable way, successful sublimation; gratifications available, socially successful, helps himself; attractive, intelligent, gifted in art; family is very adequate; family warm and helpful; relates well, realistic about brother's skills, secure, business-like, masterful; bright, outgoing, explores environment; successful in school, pleased with family, balanced.

Rating (2) normal conflicts of age.
Recent surgery, so far is handling it well; relaxed, not spontaneous, but elaborates, verbalizes complaints; over-polite and strained at first; capacity for emotional experience and communication; competes with boys.

Rating (3) average, typical, at median level, or in-between best or poorest in

this dimension.
Tense and struggling, mastering; compulsive but adjusting; resigned, mildly neurotic; withdrawn, seclusive; fearful at times; aggressively extroverted; neurotically defended; resents authority but limits herself to complaining; anxiety over supplies of esteem, food, security, but likeable and responsible; shy, but handles it; an immature, helpful "mother;" worried over grades; needs tutor and support primarily; self sufficient but doesn't know how to handle difficulties; friendly but needs help to weather parents' divorce; happy but not verbal, rather dull; tense, poor communication, father ill, compulsive tendencies.

Rating (4) a worrier, neurotic.
Problem with masculinity, overmodest, over conforming; hyperactive, wants to see real mother who left him at age 5; slight reading problem, uses to provoke step mother; a worrier, guilty, deprived, depressed; hostile, provocative; tense, insecure, serious, in shadow of brother; poor reader through emotional block but motivated, good family; defends self through illness; is picked upon; environment improving but problems already internalized.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Nightmares, fears, depression, anxiety; impaired attention, overly aggressive, helpless with rage, sullen, rigid, inhibited, isolated, withdrawn; neglected, deprived; atypical thinking; infantile; too strict or too lenient a superego; poor sexual identification, confused, wants to be someone else; sexually traumatized; death wishes and fears; pre-psychotic.

In summary, a child without the need for help (1) had no problems or difficulties, and could cope with situations which did arise because of adequate constitutional and personality resources and excellent parental assistance. Children rated (2) might have had some difficulty, but they had enough assets to function at an above average level, having appropriate outlets within themselves. The average rating (3) was given to children who needed some kind of help, perhaps environmental, tutoring, support, counseling, or brief therapy. A rating of (4) indicated a definite conflict within the personality or with reality, so that therapeutic help was indicated, but the area was relatively limited, and other areas of personality were intact. The most negative rating (5) was given to children in whom conflict had become internalized with little environmental assistance or ego attributes to turn to. In other words, intensive intervention was indicated.

f. This child has appropriate contact with and relationship to reality. An adequate contact with reality in a 2nd grade child suggests ability to utilize clues in the environment to behave in an acceptable way. Much of this is related to the adequacy of the parents as models. Effective and realistic parents help the child develop an adequate approach to reality.

Rating (1) best or most adequate in this dimension of children seen.
Ability to appraise problems; insightful, conversant; receptive, confident, precocious; relaxed, unafraid, free, poised; secure, happy, motivated, socially active; masterful, appropriate masculinity; excellent memory and explanation of family affairs; can verbalize problem with a friend, attempt to solve it; balance of internal reality made outer reality approachable; parents kindly disciplinarians, outline reality in non-

threatening way; relaxed, accomplished, creative; proud, verbally expressive, nicely disciplined; confident, active, non-hostile.

Rating (2) fairly well accomplished.
Evaluated arithmetic ability well but no "artistic" skills; parents motivate him, serve as good models, sensitive; outgoing, good in school, jokes over infirmity, interested family; accomplished.

Rating (3) average, typical, median or in-between best and poorest in this dimension.
Knows own limits, accepts things fairly well; self-sufficient, cautious, conforming; over-compensates; neurotic, demanding; self-protective, cautious; worried over being hurt and sister's illness; set to distrust reality, or hesitant; doesn't like to be deprived of pleasure by discipline, but conforms; argues with teacher; shy, not competitive; language difficulty, difficulty in thinking; does well in school, proud, shows off a bit but realistic; incompetent father and new step father have prolonged immaturity.

Rating (4) neurotic, inner reality difficult.
conflict over normal masculine strivings; superego anxiety; timid, sissy, overconforming; attention seeking, guilty, illnesses to gain attention; parents' troubles interfere with his adjustment; tattle tale, distorts the truth.

Rating (5) poorest or least adequate in this dimension of children seen.
Daydreaming, withdrawn; hyperactive; distortion of popularity; helpless, guilty, depressed, fearful; negative; pre-psychotic; neglected by parents and rejected by peers, unsuccessful in school; guilt, poor reader, provokes hostility and acts out in retaliation; poor parent models, jaded, delinquent; hostility not fused or sublimated.

In summary, a child rated as (1) was a bright, insightful youngster who could size up and handle life problems. A (2) rating suggested somewhat less skill in handling such problems. The average child (3) was limited by having only average ability or by emotional problems that kept him from sizing up situations as well as he might. A (4) rating suggested real limitations in accepting reality, but no distortion. A (5) rating indicated severe limitations even to the point of a severe distortion of reality.

g. This is a child with generally poor school adjustment. This rating attempts to generalize from learning problems and evaluates the school setting in general. Thus, the child's relationship with the teacher might serve as a mitigating factor in either direction. In other words, this item attempts to weight the other ratings and allow for a qualitative evaluation of the importance of any one area over another. The child with a good school adjustment would be achieving successfully in the classroom, and adjusting well to others.

Rating (1) best or most adequate in this dimension of children seen.
Attractive to teachers and peers, socially successful and aware, bright; precocious, curious, insightful, learns well, creative; motivated, logical, ambitious, independent, adult; well defended, self confident, achieving; bright, accomplished, masterful, moral; beautiful, achieving, well behaved, supportive family.

Rating (2) specific conflict drains this bright youngster and lowers his achievement.
Bright, accomplished, creative, but upset over examinations; bright good family, only reality keeps him from an optimal rating; good in school, communicates well, needs people; school is his saving intellectual attainment makes up for home limitations; many skills but worry and guilt; gifted, but recovering from surgery; secure internally and externally in spite of a handicap.

Rating (3) average, typical, at median level or in-between best and poorest adjusted in this dimension of children seen.
Adequate, cooperative, struggling; positive, mastering fear, covers up; socially acceptable; doesn't like school but controlled; pleased about work, accepts mother remarrying, school a saving grace; quite shy, likes school; shy, no behavior problems, bilingual; positive orientation to learning, marginal family; competent, not outgoing or challenged; resents restrictions; nice boy and family, not outstanding ability; plain, average, overcontrolled, adjusting to father's illness; environmental problem of remarriage, but school going well; positive, happy and adequate accomplishment.

Rating (4) preoccupied with parents' marital problem; learning block, but trying.
Illness and neglect; shy, immature, dull, trying to master; falls in reading, quiet, resentful; retained in 1st grade, poor environment, borderline endowment; ill, projects, guilty.

Rating (5) poorest or least adequate in this dimension of children seen.
Dull, immature, failing in school, unattractive; phobic, anxious, fears criticism; terrified, afraid; stubborn, sullen, sour, domineering, resentful; withdrawn; identifies with aggression; wierd, atypical; preoccupied with deprived home, emotional and angry; fails; decompensating, has given up.

In summary, a child rated (1) had no learning or behavior problems and was free to use his good mental energy to adjust to school. A child rated (2) had some slight problems which were compensated for because of specific abilities, but he was not functioning at his maximum, or as effectively as he might. An average rating (3) suggested lesser abilities or greater problems, so that such a child would be held to an average level of performance. A child rated (4) had either a learning or a behavior problem so that he needed some changes made to function effectively; a child rated (5) was decidedly handicapped by emotional or learning problems.

2. Criteria for psychiatric qualitative judgments 5th grade boys and girls

a. This child is comfortable with himself. To be comfortable with himself a child is expected to be at ease with his own impulses, so that he can release them appropriately in acceptable channels, and control them as necessary. He accepts his own abilities, and at this age would have a record of some accomplishment upon which he can base an evaluation of himself. He has a sense of self as an individual, and is aware of his own distinguishing characteristics. About these he does not feel inferior, depressed, or resentful. He can draw from the above characteristics a sense of strength so that he is able to face reality situations, both internal and external, without being overwhelmed.

Rating (1) best or most adequate in this dimension of children seen.
Sure, confident, secure; inquisitive, responsive, ambitious, resourceful;

polite, thoughtful, pleasant, sense of humor, confiding, relates warmly, well rounded, mature; objective about life experiences; weighs how to present herself; admits he is teased, and "teases back."

Rating (2) cooperative, polite, but some reserve.
Happy, hard working, strains to do something well; outgoing and creative, energetic, slowly accepting family's move in the case of one child; relaxed, curious, tells of father's war record with some slight discomfort which seems in contrast to other behavior; some tension, but gradually overcome.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension of cases seen.
Conventional aims; superficial; controls others by charm; self conscious and tense, emulating an older sib, has not set own goals; fears and complains but faced open and honestly; strains to make a good impression, needs reassurance; nostalgia for past, not happy at present in spite of some achievement; feels inferior and insecure, but can point to real accomplishment in class; a little depressed but could smile and reflect on what to talk about; pleasant, tended to evade questions; bland, didn't know what was going on, holding out.

Rating (4) pleasant but slow, had given up in school.
Constrictions, worries, sets very high standards and resents her failure to meet them; claims she had to improve in all subjects, but didn't like to study; life dull, nothing to do.

Rating (5) poorest of cases seen, indicative of lease adequacy in this behavioral dimension.
Depressed, sad, feels deprived; lonely, feels unlovable, a "nobody;" poor self image, deep concern regarding self; hypocondriacal, feels damaged; turns hostility inward, worrisome, tense, threatened, uneasy, overwhelmed; hostile, greedy, deep guilt, acute discomfort, inhibited, ashamed of background; failing in school, problems with parents.

To summarize, a child who showed little difficulty in coping with external and internal reality, who had accomplished something he was proud of, and was secure about himself would be rated a (1). Where there were minor difficulties but the child still managed fairly well in spite of occasional anxiety or other such factors, a rating of (2) would be given. Children who had no special sense of self or of attainment, yet no real decompensation, or who were not handling some aspect as well as they might, would be rated (3). Children showing signs of being unable to moderate the demands of external and internal reality, with pronounced difficulty in one or more areas, but still managing others, who revealed neurotic symptoms regarding their self concept, would be rated (4). A rating of (5) suggested gross decompensation in many areas, or overwhelming symptoms such as depression or hostility, with limited ability to cope with his own feelings, and with a very negative self concept.

b. This child is comfortable with others. To be comfortable with others, a child should be able to relate readily in the interview situation and to the psychiatrist. Further, there should be evidence of good relationships with friends, teachers, and family. The quality of reactions to authority figures as compared to peers is important to assess. The child who is comfortable with others is fairly comfortable with himself. He needs others, but is not excessively dependent upon them. He has some awareness of himself in comparison with his peers, so that he can realistically assess his relationships, and his successes, as he competed and worked with others. He is not overwhelmed by others nor intolerant of them. Authority is accepted and identified with, and the child of this age reveals a growing awareness of his ability to meet standards set for him.

Rating (1) best or most adequate in this dimension of children seen.
Spontaneous, expressive, loquacious, outgoing, friendly, relates, trusting, confident; communicative, assertive, poised, secure, perfectionistic, considerate, loves to do things for people; at ease with authority and peers, turns aggressive feelings inward; has many friends.

Rating (2) accomplished, cooperative, but feels a little guilty.
Many friends, even likes sibs, friendly and competitive; initial tension gradually relaxed; almost too comfortable in interview; relaxed with others, has given up striving; outgoing, comfortably feminine; polite, intelligent, free to complain about authority; much ability but standards and aspirations may be overly high, blocking effective relationships and attainments.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension of children seen.
Charming but excessively polite; superficially friendly; tense striving for friends; many friends but refuses to complete work for teacher; initially uncomfortable, but slowly gained in ease; quiet, a bit suspicious, and self contained; mild fears not incapacitating, tends to over-compensate in sports; fairly realistic but not secure, needs encouragement; a prima donna, wants to be superior to others; breezy; relates pleasantly, puts most effort into winning friends, accomodating.

Rating (4) feels inferior and unaccepted by others.
adjusts only to peers, lacks discipline, pleasure oriented; strains to make an impression; can't recognize successes.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Too obsequious, only superficially friendly; fears criticism from others; seclusive, withdrawn, different; uncooperative, stubborn, in trouble, tight lipped; acutely uncomfortable, anxious, defeated, hard to know; inscrutable; confused, unable to relate; physically handicapped, resented it and felt inferior; associated only with much younger children, unsuccessful with authority; hostile, paranoid; effeminately flirtacious; erotic; stuffed shirt; pressured; unattractive, unpleasant; whispering; excessive giggling; overly compliant; excessive shyness; counter aggression; enigmatic; utterly defeated.

To summarize, a child who related readily to adults and peers, had friends, was able to do things for people freely and with pleasure, was trusting, yet poised and secure, was considerate, but reasonably assertive would be rated a (1). Where relationships were favorable, but at some cost to the child, such as giving up striving, or some guilt; where the child related with one group at the expense of the other, such as stressing friendships over meeting the demands of authority; or stressing achievement over relationships with others, and in other ways showing a lack of balance, a rating of (2) would be given. Middle (3) ratings suggested the presence of some difficulties in relationships which could be compensated for, such as a tense striving for friends, or inability to trust people, but no great difficulty within interpersonal relationships or an excessive need for encouragement. Children rated at (4) were those who were showing a decided asymetrical development in this area, such as adjusting only to peers and in conflict with authority; feeling generally inferior and unaccepted; constantly straining to make an impression. Ratings of (5) suggested severe problems in all areas involving relationships — children who were seclusive, acutely uncomfortable, able to relate only to much younger children, or utterly defeated.

c. This is a child with serious learning difficulties. The child without serious learning difficulties is the child who is endowed with good intelligence, had profited from his earlier education, is free from the incapacitating effects of emotional problems, and is oriented toward achievement in scholastic areas. Difficulties in any of the above would limit a child's learning. At this age level, children are able to describe their school successes and failures, and have some concept of their school role.

Rating (1) best or most adequate in this dimension of children seen.
Bright, superior, got all A's, liked school, in top 10 of class; plans to go to college, wants to be a scientist, ambitious, well motivated; wide reader, goal directed, identifies with parents, perfectionistic, curious, spontaneous, vital; verbal; family backs his ambitions.

Rating (2) very cooperative, few troubles.
Mother's standards high, but child is objective about them; proud of school work, wins approval through it; very imaginative, needs to improve; school and sports equally stressed.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension of children seen.
Conscientious, polite and cooperative, lacks ambition; not too interested in school; worried about tests and marks through fear of punishment; family bribes him for good grades; mental energy being drained during family crises; bland and guarded, no particular output; good school citizen, doing his job; defensive smartness; struggling to succeed; well defended; effective controls.

Rating (4) not performing well in school.
Not disciplined, hates to study; slow in school, not ambitious; too anxious to be liked to concentrate well; dull; upsets teachers by not working, unrealistic rebellion; held back for speech defect, not bright and also feels realistically deprived; decompensating, poor reader, restricted by family for poor grades; doesn't know how she is doing in school, evasive, energy drained in other areas; very anxious; needs excessive attention and reassurance to perform; cannot concentrate.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Performance far less than estimated intelligence; too concrete, sluggish, distractable; inhibited, withdrawn, unlike others; outcast; dazed and confused, had to be led to the office; a sitdown striker, refusing to perform; in need of mothering; psychosexual confusion, troubled identification; severe reading disability; history of failure, average, dull; severely neurotic; preoccupied, attention diverted by mother's divorce.

In summary, to be without serious learning difficulties, a child should be intelligent, oriented toward achievement, verbal and energetic (1). When behavior was less goal oriented, for example, a child working for grades or approval primarily, or when he had not internalized such achievement needs, or when minor troubles did intrude somewhat, a rating of (2) was given. A child not too interested in school, or working mainly through fear of punishment, or lacking much ambition, doing no more than necessary of average ability, or held to average because of a current emotional problem was rated (3). A dull child, slow in school, unambitious, or a child whose achievement was oriented toward winning attention and reassurance only, with no internalized goals, or a child with considerable anxiety limiting concentration, or a child with a decided learning block such as a poor reader, was rated (4). A rating of (5) was reserved for children who appeared dull, who were concrete in attitude, sluggish and distractable, seriously inhibited and withdrawn, dazed or confused, in serious rebellion against school, or with a history of pronounced school failure.

d. This is a child with serious behavior problems. A child without serious behavior problems is a child whose behavior is acceptable in the school, on the playground, and at home. Consequently, behavior which would have neurotic overtones might not be judged negatively in this setting. Withdrawn or immature behavior, per se, might not be considered terribly serious.

The absence of behavior problems would suggest a child who is friendly and accepting of others and of their demands. Such a child stands up for his own needs without coming into serious conflict with his environment and he is able to balance his needs against those of others. A child who is achieving success in his activities both at school and at home, a child who has a spread of interests and hobbies, a child who identifies with and respects his parents probably has few behavior problems.

Rating (1) best or most adequate in this dimension of children seen.
Quiet, controlled, studious; nice, polite, loving disposition; highly motivated, successful, goal oriented; inhibited, colorless; stuffed shirt; tries to impress; hobbies, close to parents; well sublimated, good parental models, no outlet for aggression; covers naughtiness.

Rating (2) active, hard working, pleasant.
Sublimates into music as an outlet at the expense of sports; prankish, amusing, controlled; is able to verbalize frustrations; sublimates rebellion and dissatisfactions in art; shy, modest child, almost neurotic in her over-conforming behavior; inventive, cooperative, accepts limitations; likes to help.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Tractable; conventional, liked by peers; inhibited; over-conforming and over-willing; expresses frustration openly, not a problem child but one with limited assets; depressed and constricted; wants to be accepted, worries a lot; neurotic fear about expressing aggression; adjusts quite well, but under strain; concern about others; expresses self through passive-aggressive outlets (e.g. fails to finish work); lacks drive, prefers to stay home; can be exasperating and provocative; fears rejection from misbehavior, pays a price for friends; nice, much denial; controlling, compensating.

Rating (4) competitive hostility.
distrustful, angry, would fight to be first; neurotic fear of exploding,

struggles to stay calm; pre-conscious resentment; depressed with no sources of gratification; hostility and desire to rebel plus unrealistically pleasure oriented; tense, prima donna.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Identifies with aggression; angry, resentful, fights; asociable; weak, unstructured anger; seductive, sexually stimulated; stubborn; a boy with no masculine models, suggestable, a "weak sister," resentment due to frustration and neglect; no school successes.

In summary, the absence of behavior problems implied a child who had many gratifications, little frustration, and good controls; who liked people and knew how to get along with them, and was rated (1). A child with fewer gratifications or more frustrations or less adequate controls; one who sublimated difficulties into a single area rather than having free access to several areas, one whose frustrations were at least readily verbalized, one who avoided behavior problems by control to the point of excess, was rated (2). Children at midpoint (3) were tractable, likable, and conventional. One might get the impression that there was a feeling of strain to conform in some children. Others limited their behavior to being covert or passive-aggressive, such as foot-dragging or dawdling in doing chores. Others tended to withdraw and thus avoid problems. A rating of (4) indicated behavior problems in some areas: inability to establish adequate outlets for feelings, so that explosions were always being warded off; constant depression; hostility which was not controlled; or a striving to be first by fair means or foul. The (5) rating suggested an angry, resentful, aggressive, fighting youngster; a weak, suggestible youngster who could not avoid trouble; a chronically unsuccessful child who would be driven to find success in unacceptable ways; or a seductive, sexually stimulated youngster sure to act out in this area.

e. This child needs help. A child who does not need help is comfortable with himself and with others, has no learning problems nor behavioral problems. Therefore, a balancing of the judgments made for the first four ratings was employed here in judging the need for intervention. The psychiatrist rates children in category 1 and 2 as needing no help, thus capable of solving their own problems. Children in category 3 have minor problems which should yield readily to intervention, while children in category 4 and 5 reveal problems calling for immediate help of some intensity. Category 4 suggests a relatively limited problem with some areas of adequate functioning, while category 5 suggests fairly pervasive problems which are generally limiting.

Rating (1) best or most adequate in this dimension of children seen.
Good self concept, sure of self, many friends, gratifications, accomplished, bright, mature; realistic, balanced, secure; defenses working well; brave, aggressive; happy; successful at school, in sports, with family; not offensive in striving.

Rating (2) has resolved some problems, looking forward to future.
Likable; successful and ambitious, accepts parent's problems; relatively successful, a bit concerned at others' attitudes; actively living the life of a 5th grader; skillful in communicating and listening; difficulty in figuring out parents, but likes them; relaxed, curious, involved in interview; ambitious, tense, fair marks in school, gradually relaxed.

Rating (3) average, typical, at median level or in-between best and poorest in this

dimension.
expects relatively little; contented; colorless, inhibited, protected; average; good rebellion; covering up, struggling neurotic behavior; specific help needed; slight reading block, perhaps family goals too high; needs assistance to express resentment more realistically; nice, striving for adequacy, but a few specific fears to be resolved; shy, longs for closer contact with mother; relaxed but too pleasure-oriented, needs more frustration tolerance; school problem but has mastered some difficulties.

Rating (4) some serious problems.
Concerned over place in family, insecure; passive-aggressive conflict with parents, openly aggressive with peers; fears can be reinforced and leave child with considerable guilt; emotionally deprived and limited energy, anxious about displeasing, and wants help; insecure because mother is ill, and may not get good grades in school; extremely dependent; examination anxiety; has given up hope and is fixating at an immature level; bitter, limited endowment; lack of trust, suspicious, resentful, internalized difficulties; seeks proper identifications; reading problem.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Child must have help in order to function properly; severe neurotic reactions, family not a source of help; confused, weak, excessive denial; sad, depressed, lonely, a nobody; almost psychotic; acute discomfort, withdrawn, depressed, resentful; deprived background, insecure; incapacitating perfectionism; too obedient, lacking any spontameity; preoccupied by own fantasy; overwhelming conscience (superego); inadequately developed conscience (lenient superego); poor sexual identity, effeminate, homosexual tendencies; homocidal; disturbed affect; love greedy; severe neurotic conflicts; severe tics and mannerisms; tension without outlets.

In summary, children rated at (1) were accomplished, confident, and secure. Children at level (2) had no more than minor problems which they could solve themselves. Children rated as average (3) would profit from short term help. Children at level (4) had serious problems which limited their adjustment. This might be a chronic immaturity, a severe learning problem, specific fears or anxieties such as examination anxiety. A (5) rating was reserved for severe problems either widespread and generalized or of incapacitating intensity.

f. The child has appropriate contact with and relationship to reality. To have appropriate contact with and relationship to reality, a child by grade five should have the ability to judge appropriately, to think through problems, to anticipate the future, and to postpone gratifications. One learns this from parents who approach reality realistically.

Rating (1) best or most adequate in this dimension of children seen.
Ability to appraise and discuss problems; oriented to achievement; enjoys mastery of self and environment in school, sports, etc.; seriously sets goals for athletic excellence without neglecting school or social areas; social poise; masterful; perceptive; ambitious; defenses working smoothly and flexibly.

Rating (2) accomplishes a lot, aware of problems but careful as a result.
Stresses mastery of reality in school play, future; ambitious to be an

engineer, wonders about possibilities of success, but trying; secure, presents self well, stresses reality, for example getting homework completed; almost too ambitious, but careful in evaluating own productions; challenged, stresses mastery, evolving an "intellectual" image.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Knows his limitations; some over-striving; at times regressive, excapist; honest, active, trying, focused; has to adjust to mother working and to school problem, can handle feelings without decompensating; wants a career but not too realistic about it; doesn't care for school, merely follows orders; pleasure oriented but parents help with school work; realistic but participates no more than necessary; competition with excessive underlying anger; focuses on problems, has school problems but realistic about the future; too comfortable, not questioning, or striving enough; upset about reality.

Rating (4) very poor self image, unrealistic.
Gifted but too intense, can't focus on mastering reality comfortably; fearful, anxious about external world, projection of internal conflict; immature, a weak ego; has given up in school because of neurotic conflict; constricted relationships because of anxiety and lack of structuring; failure in school exaggerates poor socialization; sees environment as bleak and withdraws, fails to strive in own behalf.

Rating (5) poorest of cases seen, indicative of lease adequacy in this behavioral dimension.
Preoccupied, poor attention, odd, out of contact; confusion; so withdrawn from reality that nothing reaches him; distorts popularity with peers; day dreams excessively; chaotic, disturbed; breaking down; school unrewarding, family no help, defenses failing; bitter, depressed, withdrawn investment in world; hostile.

In summary, a child in good contact with reality could cope with and enjoy mastering problems in his environment, and was rated (1). Children rated (2) were a bit less successful in mastery but still oriented purposefully. Children rated (3) tended to know their abilities and limitations, but were not always realistic in their approach to problems. Lower ratings were given to children who were not free to master problems comfortably. Thus, children who suffered from neurotic conflict, were unrealistic in evaluating themselves and their problems, or were not free to achieve were rated (4). Children who were withdrawn from the world, or who seriously distorted their view of it were rated (5).

g. This is a child with a generally poor school adjustment. Generally good school adjustment implies a child who is academically successful and whose behavior is acceptable to those around him. Difficulties in either of the above areas -- or both -- would limit school adjustment. Behavior problems might reflect a current reality crisis, such as an illness or divorce within the family, or a long standing problem, such as intense sibling rivalry. Learning, by the same token, might be limited by poor endowment, neurotic adjustment, or a family which did not offer adequate models for the child.

Rating (1) best or most adequate in this dimension of children seen.
Bright, curious, creative, ambitious, motivated, interested; perfectionistic, precocious, a reader, a thinker, pseudomature; controlled, well balanced,

socially aware, attractive to teachers and peers; identifies well; sublimates successfully; scholar, athlete, family support.

Rating (2) channels energy into worthwhile activities.
Outgoing, friendly, desperate to make something of herself; bright, confident, mischievous but repents; sports emphasised over school, but a B student; likeable, some conflict over aggression; motivated to make a good impression.

Rating (3) average, typical, at median level or in-between best and poorest in this dimension.
Not too good in school but parents are concerned; minor school trouble but improving and still likes school; needs to be jacked-up academically only; not outgoing or a joiner but no real problems; competitiveness under control; motivated in school by external threats; polite, not drifting, but poor in reading; no drive toward school, but urged on by family; anxiety about school but good school achievement; uncomfortable socially, but gifted and trying in school; not ambitious, takes life as it comes; participates but not emotionally free; likeable, trying; well behaved, some covering up; defensive denial; sublimating; self contained; superficially friendly, defended.

Rating (4) passive-aggressive in class, frustrates the teacher.
Pleasant, tries to be agreeable, but far behind in school work; deprived background, failing, has almost given up; frustration tolerance much too low for age.

Rating (5) poorest of cases seen, indicative of least adequacy in this behavioral dimension.
Hostile, depressed, confused; reading disability, needs attention and affection, acting out; dull, fears criticism; has failed in school and athletics, parents won't help; anxious, unattractive to peers; rivalrous, paranoid, obese; pleasure oriented, asociable, resentful; passive-aggressive, stubborn, no friends; dependent, frightened, not free to achieve in school.

A child without a problem in school adjustment was an achieving, successful, popular child and was rated (1). A child with somewhat less success in either the learning, athletic or social areas, but with no real problems, was rated (2). A child rated at level (3) was less popular, only average in school achievement, and had fewer successes in sports or school. Ratings of 4 and 5 were reserved for actual problems such as severe learning disability, serious neurotic behavior problems, and a history of failures in school. Thus, a (4) rating suggested a child unable to tolerate frustration sufficiently to do well in school or socially. A rating of (5) suggested pervasive problems both in school and in social relationships, so that the child had almost no successes to count upon.

E. Hypotheses related to psychiatric data

The individual-focused judgments of psychiatry results in few generalizations which can be made about the behavior of children judged to be well and poorly adjusted. However, some research data is available which assist in hypothesizing about the possible sources of variation in psychiatric judgments. An interesting series of studies about changing feminine roles sheds some light on what can be expected to be considered appropriate vs inappropriate sexual identification in the children whom the psychiatrist sees. In Rabban's (1950) evaluation of the development of masculine and feminine roles, he suggests that girls are slower to accept a feminine role than boys are a masculine one in middle class groups.

Tuddenham (1951) comments on the fact that typical masculine traits seem to be increasingly approved with increasing age, while typical feminine traits of docility, neatness, quietness which are valued in the early elementary grades become progressively lees valued as the child approaches adolescence. Subsequently, Ullman (1952) argued that the docility, neatness and quietness which characterize the feminine girl of Tuddenham's findings may, at this age be expressions of anxiety and insecurity. Ullman's research suggests that maladjustment in girls is related to such traits. In turn, these behavior characteristics lead to rejection by the peer group so that the child's anxiety might be expected to increase. However, Tuddenham (1952) found that there was a regular shift in the traits most valued in girls from a pattern of ladylike submission at an earlier age toward a pattern characterized by daring, leadership, activity and extraversion. The anxiety increase suspected to be a result of peer rejection in Ullman's work would therefore be expected to occur in an older childhood group than in those children at the beginning years of elementary school.

The typical feminine patterns of submissiveness, neatness, and quietness are no doubt observable aspects of behavior in the psychiatric interview just as are the masculine traits of aggressiveness, extroversion, daring and leadership qualities. The question at this point appears to be whether the accepted qualities of more masculine type roles for girls will be perceived by the psychiatrist as being appropriate or inappropriate sexual identification. One would have to predict from the studies cited above that effeminate, immature behavior in boys would be judged as inappropriate sexual identification and have a potential relationship to the judgment of school problems. On the other hand it is difficult to predict whether aggressive behavior in girls, even though it may be judged as inappropriate sexual identification, will be related to school problems or a lack of school problems.

Since play materialswere available to all children who were interviewed, the choice of toys or activities might presumably be an additional source of observation on the appropriateness of sexual identification. Here again, there is little confusion for what is appropriate for boys. Masculine activities are well identified. But with girls Rosenberg (1960) demonstrated that when comparisons were made between the play activities of boys and girls, there was an increasing tendency for girls to choose the more masculine types of games. A companion study by Sutton-Smith and Rosenberg (1960) compared game preference to scores on a manifest anxiety scale. They found that the game choices of less anxious girls were not only feminine, they were also immature. Game choices of more highly anxious girls were both masculine and above average in maturity. Identification with the traditional activities of the opposite sex is therefore related to anxiety, and this study would suggest that a relationship might exist between inappropriate sexual identification and school problems for both boys and girls. Gray (1957) on the other hand suggests just the opposite. Her research showed that children high in anxiety showed more sex appropriate behavior than children low in anxiety. However, her work does agree with Tuddenham's comparison between behavior and peer acceptance in the fact that peer acceptance of girls was found to be related to a low level of sexuallyappropriate behavior while in boys it was related to a high degree of sexually appropriate behavior. The differences among these findings is no doubt related to differences in the dependent variables. For example, scores on a manifest anxiety scale might select a different group of children as highly anxious than observations during a psychiatric interview where evidence of anxiety such as nervousness, impulsiveness, hyperactivity, fear and other types of behavior are observed.

Two related reports are available on the significance of the number of observable symptoms and their relationship to school adjustment (Glidewell, 1957; Mensh, 1959). Both reports support the use of observational symptoms in the psychiatric interview since their results showed that there was a significant relationship between the number, frequency, duration and severity of symptoms and children judged to have school adjustment problems.

Only a hint at possible relationships between physical health and other indices of adjustment is available. Clarke et al (1961) compared the school achievement test scores of 9, 12 and 15 year old boys. He found that there was a significant tendency for groups with high scores on a physical fitness index to have higher school achievement test scores.

Factor analyses of child psychiatric data are not available. Only a few attempts have been made to study the perceptions of the psychiatrist in a uniform way. Collins and others (1962) analyses child psychiatric clinic data containing 60 items of clinical information. Little common variance was found. The factors were rebelliousness and rootlessness in boys and timidity and school failure in girls.

The question of the relationship between school achievement and personality and pediatric variables was studied by Michael and Tobias (1962). Their analysis indicated 15 factors with little or no overlap between psychological and biological functions though some type of method variance may be postulated as accounting for the lack of congruence.

A general factor is predicted from the analysis of psychiatric data. This is hypothesized as a result of the reports of the doctors which emphasized the importance of overall impression of the child in the interview as accounting for their ratings. This factor, if it appears, would be interpreted as an evaluation of the ability of the child to relate to an adult who is a doctor, who is in a school, and who is there to do no more than talk with the child for one hour. To the degree that children are able to respond to this situation and to communicate with the psychiatrist, ratings of good school adjustment would be indicated. Children who cannot verbalize, who balk at questions, who cannot talk about themselves would be found at the other extreme.

In addition to this general factor, one other factor from the observational data can be hypothesized. This factor may combine ratings of appropriate vs inappropriate sexual identification with other observations of behavior. The direction of the relationship between the variables and the rating of sexual identification would be reversed for boys and girls. For boys inappropriate sexual identification should be related to judgments of maladjustment; for girls inappropriate sexual identification has a potential relationship to ratings of good school adjustment.

F. Results of the analysis of the data

The means and standard deviations for each of the psychiatric observations and qualitative judgments can be found on Table 19. Note that after the description of each observational variable the range of the distribution is indicated. This is information which is necessary for interpretation of the means. When the range is three points, the first point of the distribution would receive a zero rating. The zeros were used in the observational data for maximum use of the IBM cards; therefore all observational rating scales have a zero at one extreme. The ratings vary from two to five points depending on the number of categories which could be rated.

Correlations between all of the variables are presented separately for each sample on Tables 20, 21, 22, and 23. Finally the factor coefficients for each of the factored dimensions can be found on Table 24.

The 23 variables in this factor analysis contain 16 observations and judgments made following the interview with the child. Following this, the psychiatrists made seven judgments on behavior traits selected as appropriate to their discipline, related to children's adjustment and school problems. In order to make the ratings for the last seven variables, the psychiatrist compared and ranked all of the children whom he saw, taking one judgment at a time. This procedure was designed to reduce halo effect and to increase the possibility of separating each of the seven qualitative judgments into distinct dimensions.

The interpretation of the factors resulting from the analysis is as follows:

1. Results of the factor analysis of psychiatrist observations for 2nd grade boys.

a. Factor 1. Inability to relate during the psychiatric interview. All of the psychiatrists' qualitative judgments except for variable 17 (This child is comfortable with himself) are included in the factor cluster. The interview judgment which is found in the cluster along with the qualitative judgments is the psychiatrist's estimate of scholastic achievement. In addition, other variables with moderate loadings on this factor are immaturity of speech, the (reciprocal) negative interaction between psychiatrist and child, low estimated intelligence, and an overall questioning of results, and many observed symptoms during the interview. The qualitative judgment (variable 17) of a child who is not comfortable with himself appears with a moderate loading. The interpretation of this factor is the ability to relate during the psychiatric interview. The child at the negative extreme on this factor was immature, had low estimated school achievement and intelligence, could not respond during the interview and talk easily about himself and others in his life space, and manifested a number of symptoms such as nail biting, nervousness, tic, etc. The fact that the psychiatrist was unsure of his judgments suggests that there might have been some conflict as to whether the behavior which was observed was related to low intelligence or whether it was a sign of malignant emotional problems. This factor seems best interpreted as inability to relate during the interview and possibly low intelligence.

b. Factor 2. Manifest anger and resentment and many symptoms. Two variables are in this factor dimension: appropriate sexual identification as observed by the psychiatrist and the presence of many symptoms. In addition, the observation of anger and resentment manifest during the interview was also loaded on this factor. Factor 2 is interpreted as a 7 year old showing appropriate masculinity for his age having many observable symptoms who is able and tends to verbalize anger. The fact that the child evidently expresses dissatisfaction with his life, but had many noticeable symptoms suggests a boy with problems, but one who is finding some means for coping.

c. Factor 3. Poor health (possibly physically handicapped). Factor 3 is most probably a factor reflecting general physical health. Two variables are found in the cluster: imperfect health and some unusual physical characteristics. The obverse of these variables is evidence of good health and no unusual physical characteristics.

2. Results of the factor analysis of psychiatrist observations for 2nd grade girls.

a. Factor 1. Inability to relate during the interview. This factor cluster contains all of the qualitative judgments made by the psychiatrist. The interpretation of the factor is assisted by a review of the variables which are moderately loaded on the factor in addition to the cluster variables. Unusual physical characteristics, passive behavior, retarded speech, inability to talk freely, negative interaction between child and psychiatrist, low estimated intelligence and achievement, many observable symptoms. This factor is comparable to Factor 1 in the sample of 2nd grade boys and is best labeled as inability to relate during psychiatric interview possibly with low estimated intelligence.

b. Factor 2. Retarded speech, immaturity, inability to communicate vs verbal, mature and manifest anger and resentment. Excessively grown up behavior, manifest anger and resentment, and mature speech are the cluster variables in

Factor 2. In addition to this pattern, the rating of inappropriate sexual identification, ability to talk freely and estimated above average intelligence receive moderate loadings on this dimension. These variables describe mature and aggressive interview behavior in this sample of 2nd grade girls. This factor seems best interpreted as aggressive, verbal interview behavior, as opposed to retarded speech, immaturity and inability to communicate.

c. Factor 3. Hyperactivity vs passivity during the interview. The psychiatric judgment of poor contact with reality, passive behavior, inability to express herself and a strongly negative reaction to the child are the cluster variables in this factor. In addition, a negative reaction of the child to the interviewer, inappropriate sexual identification and many observable symptoms were also loaded on this factor. The variables on this factor describe a poorly identified girl, passive and non-talkative during the interview. This factor can be interpreted as passive, non-verbal behavior and is possibly more malignant than Factor 2 since the psychiatrists judged these girls negatively and also rated them as having poor contact with reality.

3. Results of the factor analysis of psychiatrist observations for 5th grade boys.

a. Factor 1. Inability to relate during the psychiatric interview. Four of the seven qualitative judgments made by the psychiatrists are the cluster variables in Factor 1. In addition, the three other qualitative judgments are also loaded moderately on the factor, as well as some other observations which assist in the interpretation. Inability to express oneself during the interview, negative interaction between psychiatrist and child, estimated low intelligence and achievement, and lack of psychiatrist's confidence in judgments were the other observations. Inability to relate during the psychiatric interview appears to be the most obvious interpretation of this factor. Another possibility is that behavior related to low general intelligence is what the psychiatrists are reacting to so that this factor could be called psychiatric judgment of intellectual performance.

b. Factor 2. Immaturity and related school problems. Appropriate sexual identification, retarded speech development, and childish behavior are the three cluster variables on Factor 2. A strong positive reaction of psychiatrist to child, no observable symptoms and estimated serious learning problems and school adjustment difficulties are the other significant variables. This factor appears to be immaturity with related school problems.

c. Factor 3. Negative reciprocal relationship between psychiatrist and child. Factor 3 is reciprocal negative reaction between psychiatrist and child and the psychiatrist's judgment that his observations were inaccurate. This appears to be an "unknowable" kind of child.

4. Results of the factor analysis of psychiatrist observations for 5th grade girls.

a. Factor 1. Inability to relate during interview. All but one of the seven qualitative judgments made by psychiatrists are loaded on this factor. In addition, observations of imperfect health, unusual physical characteristics, (reciprocal) negative relationship between psychiatrist and child, estimated low intelligence and achievement, poor reality contact and the psychiatrist's lack of confidence in his judgments are the additional variables. Like Factor 1 for 2nd grade boys and girls and 5th grade boys, the underlying variables on this factor appear to be measuring the ability to relate during the psychiatric interview and to be an observation of low intelligence with related emotional and personality problems.

b. Factor 2. Immaturity, and school problems. Retarded speech, childish behavior, rebellious behavior and estimated poor school achievement are the cluster variables in this factor. In addition, inability to verbalize, minimal capacity for psychological change and a strong negative reaction to the child by the psychiatrist are the other variables. This factor seems best interpreted as general immaturity with related school problems.

c. Factor 3. Hyperactivity vs. passivity. Much anger and resentment manifest during the interview, inappropriate sexual identification, many symptoms and hyperactive behavior are the variables in this factor. The obverse of these variables is the psychiatric observation of no observable anger or resentment, appropriate sexual identification, no symptoms, and passive behavior. The most appropriate interpretation of this factor appears to be passivity vs hyperactivity.

G. Results of the factor analysis of psychiatrist's observations and qualitative judgments.

In all four samples the principal factor which emerged in the analysis of psychiatric data was one which reflected the child's general adjustment to the interview setting, or an inability to relate during the psychiatric interview. Some clues about the type of child whom the psychiatrist sees as poorly adjusted come from the loadings on this factor of other variables. A high estimated intelligence and achievement level, freedom to verbalize, a positive reaction of the child to the psychiatrist and a positive reaction of the psychiatrist to the child are examples of some of the behavior observations which correlate with psychiatric judgments of freedom from school and other problems.

Factor 2 in the sample of 2nd grade boys contains observations of manifest anger and resentment and many symptoms. Another variable in Factor 2 for 2nd grade boys is the psychiatric judgment of appropriate sexual identification. The third and final factor interpreted as poor health, contains the observations of the child's physical status.

Psychiatrist's ratings of immaturity, retarded speech, inability to communicate during the interview and potential school problems are the variables in the second factor for 2nd grade girls and 5th grade boys and girls.

"Hyperactivity versus passive behavior" during the interview is the generalization given to the variables which occur in the third factor dimension for both 2nd and 5th grade girls. The hyperactive girl is one who talks a lot, verbalizes problems freely and has many observed symptoms. The passive child is one who does not communicate during the interview, manifests no overt rebellion or anger and has no observable symptoms.

The third factor in the sample of 5th grade boys is the negative reciprocal relationship between psychiatrist and child. From some of the data presented previously and a review of the loadings of all the variables on this factor, a negative reaction is not to be construed to be overt hostility, but relatively indifferent behavior. This is the child who is uninvolved during the interview and who is not able to communicate readily during the time alotted. This factor may be rating behavior which is comparable to that in Factor 3 for 2nd and 5th grade girls (hyperactive vs passive). In the case of boys, however, it is expressed in indifference to the interview and a lack of involvement.

In each of the samples the psychiatrist's rating of inappropriate sexual identification is loaded on at least one factor. Since boys and girls at these ages are in such a fluid state of development the psychiatrist would find it difficult to make any hard and fast predictions about appropriate sexual identification. What was usually observed under the limitations of the interview setting are aspects of immature behavior such as an "overly-girlish girl" or a "girlish boy." However, a review of the other variables which are loaded on the factors where a rating of inappropriate sexual identification is present indicate that aggressive verbal behavior is correlated with inappropriate sexual identification for girls, and appropriate sexual identification for boys. Such results generally support the findings from research cited previously on sexual identification.

The variables included in the factor analysis of psychiatric data suggest that those ratings which have a significant relationship to the underlying dimensions in the psychiatric interview need to be reviewed. It should be possible to develop a set of observations and judgments for psychiatrists which would summarize the most salient, independent sources of individual differences in children which would relate to school adjustment status. Some examples of these important sources of individual differences are physical status, types of symptoms, developmental age, effective or ineffective use of aggressiveness, presence of phychological conflict, and the child's ability to make a positive impression on the psychiatrist. A clearer evaluation of the meaning of freedom to verbalize during the interview is also needed. The child who is unable to communicate during the interview may be reacting appropriately to a new and different situation. On the contrary, similar behavior may indicate intense anxiety and fear of judgmental action. The child who verbalizes readily may, on the one hand be mature, relaxed and confident, but on the other hand may be one with excellent verbal skills who finds it easy to "con" adults.

RESULTS OF THE ANALYSIS OF SCHOOL DATA

A. Descriptions of specific school-collected data

1. Data from school records

The material included in this section contained the facts from the child's cumulative record folder which had potential value for predicting school adjustment status. All of the data included in this section was recorded directly from the record and coded systematically in order to eliminate differences in the record keeping systems of the schools. The data which were used and the system for coding the information is as follows.

a. Original teacher rating of school adjustment - this was recorded directly from the rating which was assigned to the pupils by their prior teacher in terms of criteria for school adjustment which were supplied by the project office. The range of the ratings varied from 1 (good adjustment) to 7 (poor adjustment).

b. Difference between grade age and chronological age - in order to get some idea of the possibility of grade retention or grade acceleration the age of the child during May of the school year was compared to the average age of children in that school district during the same month. If the difference was negative, he was older than the average. Differences greater than one year indicated either an acceleration or retention, or under-age or over-age status.

c. Most recent ability test score - since most ability tests commonly use the IQ score rather than percentiles or standard scores, it is difficult to find a common standard for coding scores from group-administered ability tests. In order to avoid the problem of using scores from a variety of types of intelligence tests, the most ubiquitous test was selected and scores from that test were the only ones which were used in this analysis. The most commonly used test of ability in the school districts which participated in the study was the California Test of Mental Maturity. IQ scores from this test are those used here.

d. Difference between reading test grade and actual grade placement - a variety of achievement tests are also used in schools. The problem of using scores from these tests in a statistical analysis is that the tests are given at different times during the school year so that the grade placement score requires the date of the test administration in order to be interpreted appropriately. The system used here was to determine the actual grade placement of the pupils at the time the test was administered. This is figured on the basis of a ten school month calendar. Tests given in the first month would be listed with an actual grade placement of 5.1, for example. Tests given in the eighth month of the school year would be listed as 5.8. Next the actual grade placement at the time the test was administered was subtracted from the achieved grade placement on the test. Differences in the positive direction indicate better than grade level achievement. Differences in the negative direction indicate poorer than grade level achievement. Differences greater than one year in either direction can be taken as evidence that the pupil is working considerably below or above grade in the skill area being tested.

e. Difference between arithmetic test grade and actual grade placement - the procedure for coding these achievement test results were identical to those used for the reading achievement tests.

f. Grades in reading, arithmetic, language and social studies - these four variables were coded in comparable fashion. More and more school districts have returned to the letter grade system of reporting school progress. For these variables the grade on the report card at the middle of the school year (the data collection process had to be completed prior to the end of the school year) were recorded by assigning a numerical score to each grade. An "F" received a 0 score, "D", 1 and so forth, with an "A" being awarded 4 points.

g. The actual number of unsatisfactory marks was tallied from the report card - the total number of marks given for these citisenship categories such as health, thrift, obedience, effort, cooperation, promptness, respect for others, study and work habits and attitude in class varied from 0 to 9.

h. Number of days absent - this information was also recorded from the child's fall semester record of attendance. The actual number of days absent from school during the first five school months was listed. This varied from 0 to as many as 35 absences in a rare case.

i. Occupation of father- this category required careful evaluation. Very incomplete information is typical of the occupations which parents list for themselves on school records. In order to have a systematic method for classifying the occupations which were listed, the Dictionary of Occupational Titles (1949) was used to classify each occupation. The first number of the occupational code which indicates the level of the occupation was the one which was used. In general this system lists as "0" members of professional occupations and "9" members of the unskilled laboring force. Though there are weaknesses in this approach the use of the volume cited here made possible the objective classification of each listed occupation. Since the classification number suggests a ranking of the occupations with respect to education and income, this classification number was the one which was used in the analysis.

2. Tests of divergent production - Verbal and Non-Verbal Creative Thinking Tests

The Minnesota Tests of Creative Thinking have been mentioned previously. These were administered by two research assistants and scored in the project office. The administration instructions and the scoring system was standardized for the project and is available (Lambert and Fultz, 1964). Essentially, each test is scored according to four different categories. Fluency indicates the number of responses given in a set period of time. Flexibility indicates the number of changes of set in the production for one testing task. Originality refers to the frequency with which a particular type of response is found among the school population at a given age level. For this project a random sample of the 100 of the more than 800 Creative Thinking Tests which were administered was selected (using random numbers), and the types of response for this sample was analyzed in order to arrive at the originality scores. Elaboration is a score given to those responses which are more complex, or which contain more than a simple listing of the idea. The additional scoring categories are "adequacy" which refers to the appropriateness of the response for the question which is asked of the pupil; "activity," the indication of movement in the non-verbal tests; and "title adequacy," the appropriateness of the labels given to the productions in the non-verbal section of the test.

3. Teacher rating - The Behavior Rating of Pupils (Bower and Lambert, 1961)

The Behavior Rating of Pupils was the rating used by the teacher to evaluate her entire class. It contains eight items, each of which is to be rated separately by arranging the names of the pupils from the entire class on a grid representing an approximate normal distribution. Each rating is done separately in an effort to avoid rater bias. The range of ratings goes from 1, indicating least typical of the child, to 7, indicating most typical of the child. Ratings of 7 are in the direction of school adjustment problems while ratings of 1 are assumed to represent freedom from problems.

The specific items on the teacher rating scale are as follows:

a. This pupil gets into fights or quarrels with other pupils.
b. This pupil has to be coaxed or forced to work or play with other pupils. He or she will actively avoid having any contact with classmates.
c. This pupil has difficulty in learning school subjects.

d. This pupil makes unusual or inappropriate responses during normal school activities. His behavior is unpredictable.
e. This pupil works extremely hard in learning school subjects to the exclusion of any other interests or activities. This pupil pours all of his energies into school work.[1]
f. This pupil behaves in ways which are dangerous to self or others. This pupil will get into situations in which he or she may be hurt or frightened.
g. This pupil is unhappy or depressed. He or she may cry easily, be inattentive or daydream.
h. This pupil becomes upset or sick often, especially when faced with a difficult school problem, or situation.

4. Peer rating - Class Pictures (2nd grade) and Class Play (5th grade)

Both of these instruments were published by Bower and Lambert, in 1961. The peer ratings even though varying in administration procedure require nominations by class members or members of the class on twenty items of behavior. Ten behavior items represent positive behaviors and the ten remaining items are selected to represent behaviors which are typical of children with school problems. The teacher asks the 2nd grade pupils individually whom they would pick from the class for each of twenty pictures of young children in a variety of school activities. At the 5th grade pupils write the names of children in the class for each of twenty "roles" in a fictitious play that the class might sponsor. The tests are scored by noting the total number of nominations for each child, then the number of times the pupil was selected for a negative behavior, and finally by finding the percentage of negative nominations. For this analysis, however, the number of times the pupil was selected for each item was the information recorded. Since the distributions of peer nominations is definitely curvilinear, an attempt was made to make the distribution less skewed by recording only three scores: "0" for no nominations for that item, "1" for a single nomination and "2" for two or more nominations. The positive behavior traits are expected to correlate negatively with criteria of adjustment while the negative traits should be correlated positively. Specifically the items which were used in the analyses of each group are as follows:

a. 2nd grade girls
   1) A girl talking to her friend while the teacher is explaining something to the class.
   2) A girl having fun on the swings.
   3) A girl chasing a boy trying to hit him.
   4) A sick girl in the nurse's office.
   5) A happy child (girl).
   6) A girl who is being brought to school by her mother.
   7) A girl walking along with her friends.
   8) A girl fighting with another child.
   9) A girl working quietly at the table.
   10) A girl playing tether-ball.
b. 2nd grade boys
   1) A boy sitting at his desk listening to the teacher.
   2) A boy playing ball with other children.
   3) A boy fighting with this other boy.
   4) A boy playing kick-ball with other children.

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[1] This item is the only one which teachers rate in an opposite direction to the others. The correlation of this rating with other indices of school adjustment status is nearly always to be negative.

5) An unhappy boy watching other children play.
6) A boy carrying milk back to the class.
7) A boy playing on the bars.
8) A boy who seems to be having a stomach-ache.
9) A boy playing with toys while the rest of the class is working.
10) A boy being told by the teacher not to do something.

c. 5th grade girls
   1) A true friend.
   2) Somebody who is often afraid and who acts like a little boy or girl.
   3) A class president.
   4) Somebody who is stuck-up and thinks she's better than everyone else.
   5) A girl to act the part of a teacher of small children.
   6) A mean, bossy sister.
   7) Someone who is smart and usually knows the answer.
   8) A person who often gets angry over nothing and gets into lots of arguments.
   9) Someone who is jolly and doesn't cause any trouble.
   10) A bully who picks on smaller boys and girls.
   11) Someone who is liked by everybody and who tries to help everybody.
   12) A very lazy person.
   13) A very fair person who plays games fairly.
   14) A nice pest - someone who often gets into trouble, but is really nice.
   15) Someone else, besides yourself, who could direct the play.
   16) A smaller, younger child who is always falling down and getting hurt.
   17) A school nurse or doctor.
   18) Somebody who seems always to be late for school.

d. 5th grade boys.
   1) A true friend.
   2) Somebody who is often afraid and who acts like a little boy or girl.
   3) A class president.
   4) Somebody who is stuck-up and thinks he's better than everyone else.
   5) A mean, cruel boss.
   6) A boy to act the part of a team captain, someone good in sports and liked by all.
   7) Someone who is smart and usually knows the answer.
   8) A person who often gets angry over nothing and gets into lots of arguments.
   9) Someone who is jolly and doesn't cause any trouble.
   10) A bully who picks on smaller boys and girls.
   11) Someone who is liked by everyone and who tries to help everybody.
   12) A very lazy person.
   13) A very fair person who plays games fairly.
   14) A nice pest - someone who often gets into trouble, but is really nice.
   15) Someone else, besides yourself, who could direct the play.
   16) A smaller, younger child who is always falling down and getting hurt.
   17) A school nurse or a doctor.
   18) Somebody who seems always to be late for school.

Since the peer ratings are presented as pictures to the 2nd grade pupils, only pictures of girls are used in the analysis of school data for girls and only pictures of boys are included in the analysis of school data for 2nd grade boys. Even though boys are often picked for pictures of girls and vice versa, these responses were not recorded for this project. The peer rating for 5th grade pupils does not require the identification of the sex of the role except in a couple of cases. Where "boy" or "girl" is used specifically in the rating item, these are used only in the appropriate sample.

5. Self ratings

The Picture Game (Bower and Lambert, 1961) was employed as a self rating for 2nd graders. This is a set of 64 neutral pictures which the child sorts into piles according to those that he perceives as either "happy" or "sad." The inference is that the more the child sees the pictures as happy, the less he perceives himself as having problems. Conversely, selecting a number of pictures as "sad" suggests an unhappy child with the possiblity of adjustment difficulties. The score for this test is recorded simply as the number of happy pictures.

Two types of self ratings are used for 5th grade. The first is the number of negative self selections of Part II of the Class Play. This section of the test requires the child to determine which parts the teacher, others in the room, or he, himself would like to play. The 20 items of the class play are arranged in 30 quartets by randomly picking two positive and two negative items for each set of four in the self selection item. If he picks himself, or thinks others will pick him for negative items or not pick him for positive items, a score of 1 is recorded. The number of negative selections thus varies from 0 to about 20 with an average somewhat below 10 for 5th grade pupils.

The second type of self rating used in this analysis is a rating scale called Thinking About Yourself (Bower and Lambert, 1961). This requires the student to select items that are true of him at the present and then to determine which of these items he would like to be true of him in the future or in the present. It is an attempt to get a measure of his present state of self dissatisfaction. The test is scored by determining the degree to which the pupil wishes to be more like or less like the item in question. Each item can receive a score of from 0 to 3. The sum of the item scores is then used in this analysis. High scores indicate a great degree of self dissatisfaction. Low scores suggest satisfaction with the present state of affairs.

B. Hypotheses related to the analysis of school-collected data

Two intellectual factors should appear in the factor analysis of the 5th grade data. One representing convergent production and the other divergent production based on scores from the Creative Thinking Tests. Convergent types of thinking as represented by group administered ability and achievement tests have been shown repeatedly to be related to poor school adjustment, and Torrance (1962) has suggested that pupils with high divergent thinking scores tend to be more alienated from their peers. Conversely, one could argue that divergent production tests should provide direct measurements of degrees of freedom in cognitive endeavors; therefore, pupils with poor school adjustment, reduced behavioral freedom, should be more frozen in their responses and thus produce low scoring records.

A socio-economic factor should be available from these data, but since only one variable defines this possible dimension, the socio-economic level as measured by father's occupation will probably be most related to intelligence factors.

Ideally, teacher, peer and self ratings should reveal factors which define behavior syndromes, or characteristics of particular types of pupils problems. These syndromes, if they were to be defined by factors would fall into the areas of acting-out or aggressive behavior, withdrawn or seclusive behavior and learning problems in general. The particular structure of the ratings, and the moderately high intra-correlations among teacher ratings and the peer ratings suggest that a teacher interaction factor and a peer interaction factor would evolve rather than specific descriptive behavior factors.

The self rating measure should appear in a single factor, except for the fact that only two variables define this dimension in the 5th grade samples, and only one in the 2nd grade samples. Therefore, no general hypotheses about a self rating factor will be made.

C. Results of the analysis of the data

The factor analyses presented in this section represent data on the total school population from which the project pupils were sampled. Therefore the Ns are all larger than 300 pupils. Even though 1100 2nd graders and 1100 5th graders were in the original sample the reduction in the sample size for this analysis comes about because of incomplete data in some categories. No biasing of the results is expected since the incomplete data were in categories such as ability test scores or achievement test results and not related to any of the adjustment or teacher rating categories.

The means and standard deviations for each of the variables for each sample are presented on Tables 25, 26, 27 and 28. The correlation matrices for the interrelationship of these data can be found on the subsequent tables, 29, 30, 31 and 32. Finally the factor coefficients for every variable on each extracted factor are presented on Tables 33, 34, 35 and 36.

The interpretation of each of these factors is as follows.

1. Results of the factor analysis of school-collected data, teacher, peer and self-ratings for 2nd grade boys

a. Factor 1. School grades. The cluster variables in the first factor dimension are grades in reading, arithmetic, language and social studies. In addition to these the teacher rating of learning difficulties also appears with a moderately high loading. This factor is obviously school grades.

b. Factor 2. Teacher rating of school maladjustment. Teacher ratings of learning difficulties, inappropriate behavior, unpredictable behavior, crying and unhappiness are the principal variables in this factor. In addition school ability test scores, the number of unsatisfactory marks and peer ratings of aggressive behavior, inattentiveness and getting into trouble have moderately high loadings. This factor is a school maladjustment factor with the ability test scores, behavior ratings on report cards and peer ratings minimizing the possibility that the factor represents method variance from the teacher rating.

c. Factor 3. School ability. This factor is made up of the ability test scores, and performance on reading and arithmetic achievement tests. In addition, the occupation of the father as listed on the cumulative folder is moderately loaded in this dimension.

d. Factor 4. Peer ratings of school behavior problems. In this factor the peer ratings of acting out behavior, aggressive interpersonal relationships and getting into trouble in school are the principal cluster variables. The teacher rating of getting into fights or quarrels is moderately loaded in this dimension. This factor is peer judgment of acting out behavior confirmed by the teacher rating of fighting and quarreling.

2. Results of the factor analysis of school-collected data, teacher, peer and self-ratings for 2nd grade girls

a. Factor 1. School grades. The first factor which appears in this analysis is school grades, with the grades in reading, arithmetic, social studies and language as the only variables with coefficients of note.

b. Factor 2. Teacher rating of school maladjustment. The principal variables in this dimension are the teacher ratings of various pupil behavior problems. In addition, the number of unsatisfactory marks, ability test score, and the peer ratings of not paying attention in class and fighting receive moderate loadings. Since the factor coefficients of the teacher ratings are highest, this factor appears to be teacher perceived school problems or teacher ratings of school maladjustment.

c. Factor 3. School ability. This factor is made up of the group administered ability test and reading and arithmetic tests as well as the occupation of the father. This is clearly a factor representing school ability or convergent production.

d. Factor 4. Peer ratings of acting out behavior. Only three variables are found in this dimension. They are peer ratings of not paying attention in class, chasing another child and fighting. This factor can be best termed peer ratings of acting out behavior.

3. Results of the factor analysis of school-collected data, teacher, peer and self ratings for 5th grade boys

a. Factor 1. Verbal divergent production. The variables defining this first factor dimension are the six scores from the verbal Creative Thinking Tests. This factor is apparently verbal divergent production.

b. Factor 2. School grades. Even though the group administered ability and reading achievement test scores receive moderate loadings in this dimension, the higher loadings of school grades suggests that this factor is comparable to the one in both of the previous sets of data. School grades is the name which is given to these variables.

c. Factor 3. Non-verbal divergent production. Only scores from the non-verbal Creative Thinking Tests are found in this dimension. Non-verbal divergent production is clearly represented by this set of data.

d. Factor 4. Teacher and peer ratings of school maladjustment. Nearly all of the negative teacher ratings and the peer ratings with signs as predicted (negative coefficients for the positive ratings and vice versa) are found in this factor. The variables with the highest loadings are those of acting out behavior, not liked by others, and not being fair in games; however other teacher and peer ratings of school problems are also found with moderate loadings. This factor appears to be congruent teacher and peer perceptions of school maladjustment. The self rating from part II of the Class Play also appears with a moderate loading.

e. Factor 5. School ability or convergent production. Ability and achievement test scores, age and father's occupation are the variables in this factor. This factor is quite easily defined as school ability or convergent production since no other variables of note are to be found.

4. Results of the factor analysis of school-collected data, teacher, peer and self ratings for 5th grade girls

a. Factor 1. Verbal divergent production. Here the scores from the verbal Creative Thinking Tests receive the highest loadings. Those from the non-verbal section of the test have coefficients of moderate size also, but the name for this factor of verbal divergent production was selected since the variables from the non-verbal section of the test appear in another factor. The score from the school ability test also has a moderate loading and this factor may need to be re-examined as one measuring ability in general.

b. Factor 2. School grades. The four grades assigned by the teacher for achievement in school subjects are the only variables found in this dimension except for the teacher rating of difficulty in learning school subjects. Ability and achievement test scores receive loadings of inconsequential size. Evidently non-intellectual factors contributing to school grades operate more directly here than in the case of 5th grade boys where the comparable factor does have a loading of at least moderate size for the variables measuring ability and achievement.

c. Factor 3. Teacher and peer ratings of school maladjustment. Nearly all of the teacher and peer ratings are found in this factor. Peer ratings of positive behaviors appear with negative coefficients as predicted. Here is a factor which represents teacher and peer perception of school problems. Even though teacher ratings and peer ratings appeared as factors in the second grade samples, the fact that, in the samples at the 5th grades, they appear together indicates greater congruence of perception of problems at the older level of development.

d. Factor 4. Non-verbal divergent production. The remaining variance in the data can be accounted for by four of the scores on the non-verbal Creative Thinking Tests. This dimension can be readily called non-verbal divergent production.

D. Summary of the analysis of school-collected data

The school data which were used in these analyses included behavior ratings of pupils by teachers and peers, school grades, test scores and so forth. In all four samples, grades emerged as the principal variables in a separate factor with ability and achievement test scores receiving secondary weights. This is especially interesting since one would expect that grades, achievement test scores and ability test data should be essentially homogeneous. Such was not the case, thus indicating that school grades reflect non-intellectual traits to a considerable extent, probably much more than mental health specialists or school workers would have heretofore expected. Ability and achievement test scores emerge as another factor in three samples, but not in the analysis of the data for 5th grade girls. In the two samples of 5th graders, the verbal and non-verbal Creative Thinking Tests provide two additional factors; however, there appears to be some evidence that convergent and divergent abilities are more related in girls than in boys. This difference in the sample of girls should be compared to the factor analysis of psychologists' test data since visual motor abilities which appear in a separate group of variables for boys are found with other ability data for girls. Different types of abilities are evidently more highly correlated with one another for girls than for boys.

The behavior ratings of teachers and peers provide some interesting findings. For both 2nd grade boys and girls learning difficulties, inappropriate behavior, unpredictable behavior, crying and unhappiness are the teacher's ratings of behavior which appear to be most related to one another and are extracted as a third factor. This indicates that boys and girls with problems are comparable in the eyes of the teacher in the type of behavior syndrome which they develop. The difference between them lies in the fact that girls are also seen as having specific somatic difficulties while this is less noted in boys. Acting out behaviors also characterize the specific group of behavior ratings which peers assigns to both boys and girls. Peer ratings of fighting, being scolded by the teacher, not paying attention in class, and aggressive playground activities emerge as the variables in a factor for both boys and girls at 2nd grade.

In the sample of 5th grade pupils the picture changes to what we have been most used to - that of the boys being seen most often by teachers as immature, unpredictable, fighting and avoiding school work, and by peers as fighting, not being helpful, and not playing games fairly. Girls, on the other hand are seen by teachers as unhappy, often sick, withdrawing, learning problems and by peers as not happy, not helpful, and getting into trouble. At the 5th grade level a single factor combines teacher and peer ratings for both boys and girls. This suggests greater congruence of teacher and peer perception of pupils than at 2nd grade where teacher and peer ratings are found as seperate factors.

The self rating test does not load on any of the dimensions for the 2nd grade samples. For 5th graders the second section of the Class Play in which the pupils select themselves for the roles which they would like to play and the ones which they think the teachers and other members of the class would pick them for is found in the factor with teacher and peer ratings of school problems. Thinking About Yourself, the self report device which attempts to measure self satisfaction has a borderline coefficient for boys in the factor of negative teacher and peer ratings. In order to get a clearer picture of the relationship of self ratings to these other data, other variables measuring different aspects of self reporting should be included.

A NOTE ABOUT RELIABILITY

The results of the factor analyses presented in this report must be interpreted in the light of the reliability of the ratings and test scores which were used. Ratings are fraught with problems of reliability. Measures of the reliabilities of ratings of the type used in this study are virtually impossible to obtain since they require independent observations and ratings by at least two clinicians seeing the child at the same time. These ratings would then have to be correlated to determine the reliability of the rating procedure. However, not only the situation changes when more than one person makes the observation but children vary from day-to-day. Subsequent observations, therefore, would result in taking different samples of behavior. The child is naive about a psychiatric interview only until he has had his first experience in that setting. His resultant sophistication changes his response enough so that high reliabilities of certain observations and judgments could not be expected. The realities of research of this type are that one must be content with ratings which are taken within the single setting in which the child is seen. One compensation for this procedure, however, is that such ratings and observations will be fairly comparable to procedures which can be established easily in practice so that the results of the research have a ready application to operational programs.

Nevertheless, what can be said for the reliabilities of clinical ratings? Bendig and Sprague (1954) discovered that the higher the education of the rating group, (in other words, the greater the experience in making ratings,) the greater the reliability of the judgments. They compared ratings made by students in an introductory psychology course with post-doctoral psychologists. The interjudge and intrajudge reliabilities of clinical psychologists were evaluated by Goldfarb (1959). He found reliabilities consistently around .60.

It is assumed that when continuous judgments are made of observations and ratings, rather than discrete classification, the resultant reliabilities of the judgments are higher. Also when anchor cases are found for ratings, the reliability is expected to increase. Minimizing halo effect and other types of rater bias also is expected to increase reliability. While little can be said for the exact reliabilities of the ratings which were used in this project, one can infer at least moderate reliability from the fact that the characteristics of the anchor cases were comparable for each of the clinicians for each rating and from the fact that the rating procedure itself called for careful scrutinizing of data and evaluating every pupil with respect to all other pupils in order to rank all of them on a continuous scale of judgments. Halo effect was reduced by asking for a single rating at a time in which the clinician was required to judge and rate all cases with respect to one another.

When data from parents are used, some caution has to be made for inaccuracies in the parent's recall of specific information about the child in question. Haggard (1960) investigated the reliability of a mother's account of facts about her child's early life experiences. A mother's statements had many inaccuracies when compared to the actual data which were on record from previous interviews. Even though Haggard's study cautions researchers in the use of such data, it is not too applicable to this project since social worker's judgments about maternal attitudes or about conditions in the home were based on their own observations and not necessarily on the mother's recall of specific information.

Test scores from the psychologist's test battery have had demonstrated reliability, at least as far as the scoring of the test is concerned. The WISC has a reliability of better than .90. The Benders from this project were scored by a single scorer. The reliability of the scoring procedure has been studied by comparing scores assigned to the protocols by the same scorer on two different occasions over two months apart. The reliability of the scoring procedure was better than .90 for each part of the test.

The Creative Thinking Tests are still being revised by Dr. Torrance, and firm estimates of the reliability of the tests are not available. The scoring procedure has been studied and a correlation of better than .60 has been found between scores on the tests from two scorers. Since the Creative Thinking Tests were scored under controlled conditions in this project with a single scorer working on each section of the test, the reliability of the scores are expected to be higher in the case of the data presented here. Test-retest reliabilities are not available. Measures of internal consistence are not really applicable to the Creative Thinking Tests either.

Reliabilities of The Class Play, Class Pictures, Picture Game and Thinking About Yourself are available. Test - retest data indicates that The Class Play has a stability coefficient of better than .90 for 5th grade pupils. The Class Pictures have a test-retest reliability at the 2nd grade level of .76 for the total number of selections and .84 for the total number of even (negative) selections. Thinking About Yourself has a retest reliability of better than .80 on a previous form of the test and the Picture Game has a retest reliability of .75 for boys and .65 for girls. It is reasonable to assume that the ratings, observations and test scores presented in this report are reliable enough to be used in factor analyses. The measurement error is difficult to study in the case of the observations and judgments; however, every effort was made to keep the procedures for making the ratings and the criteria used as consistent as possible.

Since so many comparable factors appeared in the different sets of data in the analyses presented previously, one can infer fairly consistent or reliable procedures from one clinician to another. Most of the extracted factors are in agreement with those that were hypothesized. When error in ratings and observations did occur, the error was distributed across the data from all samples rather than consistently accounting for bias in a particular set of results.

RESULTS OF THE SUMMARY FACTOR ANALYSES

Altogether 22 factors were extracted in the five factor analyses for the sample of 2nd grade boys, 21 factors for 2nd grade girls, 23 factors for 5th grade boys and 24 factors for 5th grade girls. The fact of notable comparability among the factors for all four samples suggests that the factors which were extracted are specific types of variables capable of replication in other situations which have a functional relationship to the psychological test setting, the psychiatric interview, and the social worker home visit.

Very careful interpretations must be made of factors such as the ones described previously. Though names are suggested for the groups of variables which emerge in each of the factors, these titles are subject to change and revision as more data and further research modify the meaning which can be attached to the results. Before proceeding further with interpretations of the factors, it is necessary to determine whether or not these factors represent potentially true underlying psychological variables or whether the differences are a result of method, personnel or situational variation.

By measuring the extent to which these observations or factors are related to one another, one can suggest whether the behavior in question is typical of the child, a result of the person making the observation, or a result of the situation in which the observation was made.

If the findings from these factor analyses are to have psychological meaning, the presence of method or situational variance has to be ruled out as much as possible. Method or situational variance can be suspected to be operating when the variables in the factor come from a single set of observations. An example of this would be the case where a factor is specific to psychiatric observations and not related to any other criterion variables. In this case the factor represents the child's response to being interviewed in school, and not underlying behavior differences to which psychological meaning can be attached. Another example would be the case where all of the Bender scoring deviations are found in one factor without the presence of other test scores. In this case one would have to interpret the findings as being related to the particular test requirements and not to visual-motor or perceptual variables. In either or these cases, the psychiatric observations of the Bender scores, if these variables can be shown to be related to variables measuring similar traits outside of the situation in which the measures were taken, there is some support for interpreting them as psychological rather than method variance.

The summary factor analysis employed in this study served two purposes. The first purpose was to determine whether the clinical disciplines were contributing information about children which had in common the prediction of school adjustment and general vulnerability to problems. The second purpose was to determine whether or not the factors extracted in each of the analyses were possibly the result of method variance or significant psychological variation. The first step in conducting the summary analyses was to determine a score for each pupil on each of the factors which were extracted. Next the factor scores were correlated and a summary factor analysis was conducted. While the multiple group method was used for the first five analyses, a principal component method was employed for the summary analyses since no cluster groupings were obvious from an inspection of the correlation matrices and no *a priori* hypotheses could be made about how the first order factor scores would relate to one another in a summary analysis. The factors which were extracted in each of the four samples were then subjected arbitrarily to a varimax rotation. The rotated factor loadings on each of the first order factors on the summary factors are presented on Tables 41, 42, 43, and 44.

Four factors were extracted in each of the analyses. The interpretation of each of these summary factors is as follows.

A. Results of the summary factor analysis of the first order factors from the data collected on 2nd grade boys

1. Summary factor 1. School maladjustment. This factor contains all of the first order factors of intelligence and achievement, socio-economic status, grades, teacher ratings of learning difficulties, inappropriate behavior and crying and unhappiness, inability to relate during the psychiatric interview and the social worker factor of school maladjustment with emotional and social disturbance. These factors represent unproductive, unverbal, untrained, undomesticated and unattended children. This summary factor is clearly an adjustment or vulnerability factor in which at least one first order factor from each discipline is present.

2. Summary factor 2. Poor performance during the psychological examination and inappropriate behavior without specific ability deficits. This factor contains first order factors which suggest poor coping with the test situation. Few responses are given on the Rorschach, the child's behavior is nervous, brash and defensive and the Bender protocol indicates visual-motor difficulties. In addition psychologist's estimates of low intellectual functioning and achievement are present; however, the lack of any factors from intelligence and achievement tests suggest that this is not intelligence per se, but achievement in the testing situation.

3. Summary factor 3. Poor performance on the Rorschach and Bender, teacher ratings of school problems with no specific ability deficits. Poor visual-motor ability and perceptual difficulties, negative teacher ratings and indifference to the testing situation are the first order factors in this grouping. These factors indicate a child with developmental learning problems who is also having school adjustment difficulties. This may be a set of behavior representing immaturity rather than more malignant types of vulnerability.

4. Summary factor 4. Cultural problems without adjustment difficulties. This group of first order factors appears to be problems related to cultural difficulties without direct manifestations in the school setting, either in terms of behavior or learning. This child comes from a deprived home, does not participate in the psychiatric interview, tends to use small details on the Rorschach, has lower WISC scores, but no particular problems in the perceptual-motor area and no specific adjustment difficulties.

B. Results of the summary factor analysis of the first order factors from the data collected on 2nd grade girls

1. Summary factor 1. Social problems without ability deficits. This first group of variables describes a fairly bright girl who comes from a home in which economic deprivation, problems in peer and sibling relationships and social conflict are present. Since the first order factor of socio-economic status receives a negative loading on this factor, one must assume that the social problems are not ones of poor housing and neighborhood, but of a family which is perhaps highly mobile within the social class structure thus accounting for the social conflict.

2. Summary factor 2. School maladjustment. The first order factors with high loadings on this factor suggest an inhibited little girl with poor intellectual and low socio-economic status. Negative teacher ratings, an inability to relate during the psychiatric interview, poor psychological test performance, visual-motor difficulties, and familial and psychological problems as noted in the home are obviously a school adjustment summary factor.

3. Summary factor 3. Poor Rorschach and Bender performance, with good self control and no ability deficit. Only first order factors from psychological testing or psychologist's inferences are included in this summary factor. The loadings on

these first order factors on summary factor 3 suggest a girl with good self control and frustration tolerance during the testing situation who does poorly on the Rorschach and makes some design errors on the Bender. This is a girl who adjusts to the testing situation when the demands are specific (Bender), but one who will not risk anything in an unstructured situation (Rorschach). Socio-economic status receives a low positive loading, but no ability factors are found in this set of variables.

4. Summary factor 4. Acting out behavior, but good adult relationships. The first order factor of peer ratings of fighting, aggressive behavior and getting into trouble relate nicely to the factor of psychiatrist's judgments of hyperactivity during the interview. Perceptual-motor difficulties on the Bender and low socio-economic status are two first order factors with moderate loadings. The fact that the psychiatrist judged these girls positively, that they were able to relate well during the interview suggests that these factors represent a girl who gets along poorly with her peers, is hyperactive, careless in written school work, but one who responds well to adult attention.

C. Results of the summary factor analysis of the first order factors from the data collected on 5th grade boys

1. Summary factor 1. School maladjustment. Low intelligence and achievement, teacher and peer ratings of acting out, not liked and not fair, low Creative Thinking Test scores, immaturity, and inability to relate during the psychiatric interview along with low socio-economic status are the first order factors in this summary factor. This factor is school maladjustment and vulnerability with peer intellectual and social resources. The low loadings of low frustration tolerance and evidence of emotional disturbance from the home interview also support this interpretation.

2. Summary factor 2. School adjustment problems with social and interpersonal difficulties without ability deficits. The first order factors in this group suggest evidence of cultural deprivation with related school problems where intelligence is not a factor. Since there is a low loading on this factor of school grades this appears to be a case of adjustment difficulties which are primarily a result of cultural factors, not of a specific intellectual deficit, but a case of lower grades in school because of the contribution of non-intellectual variables.

3. Summary factor 3. Poor interview behavior. Only two first order factors receive loadings above .300 in this summary factor. These suggest a boy who is overwhelmed by the interview situation. He has poor self control during testing and is seen by the psychiatrist as immature with related school problems. The remaining first order factors with low loadings suggest that this boy is generally seen as uninvolved and indifferent by the psychiatrist, and that the psychiatrist is not sure whether his judgment should be one of natural anxiety in a new and different situation (the psychiatric interview) or of behavior which is symptomatic of school problems.

4. Summary factor 4. Poor performance on psychological examination with no specific ability deficits. The first order factors which are grouped here lead toward the interpretation of no deficiencies in intellectual potential per se, but a poor application of cognitive resources to the testing situation. The fact that boys with this pattern do better in the psychiatric interview situation suggests that their disability shows up more in psychological evaluations. Disagreement between psychologist and psychiatrist about the severity of the problems would certainly be expected in cases where this pattern occurs.

D. Results of the summary factor analysis of the first order factors from the data collected on 5th grade girls

1. Summary factor 1. School maladjustment. The first summary factor for 5th grade girls is similar to the one extracted for 5th grade boys. Low intelligence and achievement, negative teacher and peer ratings, social worker ratings of school maladjustment with emotional and social disturbance, low socio-economic status, perceptual-motor difficulties, but no particularly negative rating from the psychiatric interview. The failure of the psychiatrist to "see" these girls probably is due to the fact that they "give up and block" during the psychological testing and would be expected not to disclose themselves during other interview situations. This factor is clearly one of school adjustment difficulties and vulnerability to problems.

2. Summary factor 2. Productivity on tests with teacher ratings of school problems. The first order factors in this summary factor suggest a very productive girl, where the productivity is not particularly related to intelligence (low WISC loading) and who is judged by teacher and peers as generally withdrawn. This is a girl who tries to please adults, who is grown-up, obedient, and one who doesn't give up. The high loading of the use of small details on the Rorschach with the lower, but moderate loading on verbal divergent production suggest that this is a child who produces easily, but who responds to the obvious in the situation (use of popular Rorschach responses) and risks nothing by putting little of herself into the response (insignificant loading on ability to relate during psychiatric interview, and on use of whole card and human movement determinants on the Rorschach). Nevertheless her good verbal response may be covering up contemporary problems in the school setting. These problems are not noted by the psychiatrist since she appears grown up and in command of the situation.

3. Summary factor 3. School learning difficulties with social problems. The first order factors of the social worker rating of school maladjustment with cultural deprivation, peer self control during testing and an inability to relate during the psychiatric interview are contrasted with poor verbal divergent production and school grades. Since the WISC factor received an insignificant loading on this summary factor, the interpretation is that this pattern describes a girl who is underachieving for her measured ability, and whose poor school achievement may be a result of a poor social environment. Her problems are not too well-cloaked, however, with evident difficulties in self control and inability to communicate during the psychiatric interview.

4. Summary factor 4. The first order factors in this final summary factor suggest a grown-up, shy, dependent girl of 11 with poor self control during the testing situation. The Rorschach factor of human movement response along with these other first order factors describe a rather withdrawn, inner-directed girl who is threatened by new situations. The obverse of this pattern is immaturity with overt control and responding to the obvious on tests (populars on Rorschach with no W or human movement).

E. Discussion of the findings from the summary analyses

The definite relationship between measures of cognitive, social, familial, behavioral and interpersonal factors extracted in the analyses presented previously lend support to the use of school adjustment or vulnerability to problems as a research focus rather than specific etiological or problem classifications. While there appear to be school adjustment problems which are a manifestation of disturbances in all of the above variables, there is evidence presented herein that in some cases cultural deprivation and personality differences may not necessarily coincide with school or other adjustment problems. It is apparent that the degree to which intellectual or social deficits affect the adjustment of a particular child in his ability to cope or restrict his alternatives in school. The girls from poor cultural environments who manage to achieve well in school may have found a means to reduce the effect of the cultural handicap. When other girls with similar handicaps and comparable intellectual gifts find no effective way to cope with the school or life situation and the result is a poor adjustment.

Also the interrelationship of the data tend to support the fact that the results are due to real differences in children to which theoretical significance can be attached rather than an interpretation due to method, personnel or situational factors. Each summary factor can be taken to represent a type of clinical pattern of observations and responses which will be characteristic of some children in response to the clinical evaluation.

The data included in this report are evidence that the social worker, the psychologist and the psychiatrist are all able to contribute evidence from their specific disciplines which is predictive of this adjustment status. What is necessary is a refinement of their procedures for more accurate and reliable prediction of school adjustment. The social worker needs to develop interview procedures which are capable of isolating health factors, cultural and social deprivation, the family's relationship to the child, and the child's psychological development. With the evidence provided from the factor analysis of the social worker interview summary, it is feasible to suggest the possibility of rating one aspect of the home interview while holding others constant. In addition an over-all rating of the family's ability to cope with problems is needed.

The psychiatrists need to refine their procedures for rating the health and robustness of the child. While these variables turn up as a factor in one sample, they are included in other factors or not evident in the other samples. In addition an evaluation of the anxiety which the interview situation produces for the child should be an excellent source of inquiry regarding the child's ability to meet a new and threatening situation and adjust to it. The criteria for the several psychiatric judgments suggest that inability to verbalize, over-reaction to the interview situation, and poor management of resentment, anger and rebellion are all signs for further consideration and refinement of observation and rating techniques. On the other hand, cautious ratings should be given for the child who adjusts too readily to the interview. Appropriate delay of ready response, adequate self control, and defensiveness are no doubt some of the signs of the well-adjusted, well-defended child.

The psychologists have the greater variety of well validated, reliable tools at their disposal. However, it is obvious from the results of the factor analysis that their ratings on other personality and behavioral variables are submerged in the data which they collect on the child's cognitive abilities. Some justification for the emphasis on intelligence and intellectual functioning can be given if the focus of the psychologist is on judging the overall ability of the child to function in a school setting. There is no question that good intelligence provides a child with more resources with which to cope in school and in other life situations. The psychologists need, in addition to ratings and measures of intellectual ability, techniques for evaluating the degree to which the child's personality development is dependent on his cognitive resources.

CONCLUSION

The data presented in this report lend strong support to the ability of the social worker, clinical psychologist and psychiatrist to predict adjustment status of school children. This ability has never been doubted, but it has usually been studied in a setting where clinicians share judgments about their data and come to a collaborative diagnosis of the degree to which the child is having school or related difficulties. Here are data to support the fact that members of a clinical team can use their special disciplines to arrive at independent conclusions regarding children which have a relationship to general vulnerability and school problems. The social worker's forte is in the area of evaluating the economic and social resources of the family as well as the psychological armamentarium which the family possesses to deal with ongoing life problems. The psychologist has a rich source of tests and observations which permit him to make a number of predictive judgments about the child's cognitive resources and his ability to use his intelligence in an effective manner. The psychiatrist is best able to see the child as he presents himself to an adult, and as he sees himself in his present world. All of these evaluations have been shown to be important predictors of general vulnerability and school adjustment status.

One must be careful, however, in using a single source of information as the sole predictor of a child's adjustment status. When cultural deprivation is related to school problems, the intelligence of the child and his psychological development are additional important causative variables. From the data reported herein, it is apparent that there are few examples of single sets of data being the sole predictors of adjustment status. Where on deviation in adjustment or coping resources are present, usually others are to be found also. Mental health specialists could do well to study vulnerability in general terms than to focus on artificially discrete behavior categories such as delinquent, culturally deprived, emotionally disturbed or school drop out.

Interview, testing and observational procedures for each discipline have been described in detail. Since criteria for all of the observations and ratings which were used are available, replication of these procedures to other situations is quite feasible. The findings of the work can be replicated in other situations or applied to other studies of school adjustment.

The results of the factor analyses presented in this report demonstrate that social and cultural problems may exist without the presence of adjustment difficulties. Deviations in parent-child relationships or difficulties in the child's psychological development are also found without the presence of adjustment problems. While we infer in both of these cases that such children are more vulnerable to problems, a specific child's vulnerability appears to be related to his ability to cope with such environmental and personal deficits. By studying general vulnerability and comparing specific epidemiological patterns with outcomes, it may be possible to study coping ability directly and determine how the same set of given resources result in failure in one case and success in another.

Table 1

MEANS AND STANDARD DEVIATIONS FOR EACH VARIABLE USED IN THE FACTOR ANALYSIS OF SOCIAL WORKER'S SUMMARY AND QUALITATIVE JUDGMENTS

No.	Variable	2nd girls		2nd boys		5th girls		5th boys	
		M.	S.D.	M.	S.D.	M.	S.D.	M.	S.D.
	SUMMARY JUDGMENTS- presence of family, social or personal situations related to adjustment:								
1.	Genetic	1.61	0.94	1.47	0.92	1.57	0.86	1.56	0.90
2.	Physical defects	2.00	0.77	1.96	0.78	2.11	0.72	2.01	0.76
3.	Physical conditions	0.47	1.05	0.65	1.10	0.27	0.72	0.27	0.76
4.	Parent-child relationships	1.73	0.52	1.85	0.54	1.93	0.37	1.97	0.71
5.	Other adult-child relationships	1.05	0.28	1.08	0.39	1.09	0.39	1.09	0.41
6.	Sibling relationships	3.19	0.58	3.18	0.50	3.09	0.39	3.11	0.38
7.	Peer relationships	3.34	1.00	3.36	1.05	3.59	0.86	3.69	1.07
8.	Economic deprivation	3.53	1.09	3.50	1.11	3.52	0.91	3.77	1.07
9.	Norm conflict	3.32	1.34	3.64	1.35	3.41	1.26	3.90	1.24
10.	Social disorganization	3.09	0.41	2.99	0.69	2.96	0.60	3.10	0.57
11.	Social mobility	3.19	1.12	3.08	1.14	3.23	1.02	3.44	0.98
12.	Overall evaluation of the presence of adjustment problems	3.41	1.35	3.68	1.33	3.39	1.29	3.96	1.22
	INDEX OF SOCIAL STATUS CHARACTERISTICS:[1]								
13.	Description of house	4.09	0.98	4.12	1.11	3.84	1.26	3.71	1.08
14.	Rating of neighborhood-dwelling area	4.03	0.85	4.05	0.85	3.77	0.71	3.84	0.85
15.	Source of income of principal wage earner	4.40	0.77	4.42	0.92	4.23	0.71	4.02	0.71
16.	Occupation code of principal wage earner	3.79	1.71	4.23	1.63	3.64	1.65	3.54	1.78
	QUALITATIVE JUDGMENTS:								
17.	Serious physical problems	2.61	1.20	2.85	1.17	2.59	1.05	2.79	1.10
18.	Deviant psychological development	2.47	1.24	2.80	1.22	2.38	1.19	3.00	1.12
19.	Poor social environment	2.49	1.18	3.00	1.08	2.48	1.15	2.70	1.09
20.	The family would produce problems	2.75	1.24	3.15	1.02	2.59	1.29	3.01	1.14
21.	Serious personality problems	2.61	0.99	2.93	1.17	2.25	1.09	2.95	1.17
22.	School adjustment problems	2.36	0.99	2.88	1.11	2.00	0.93	2.79	1.08
23.	School learning problems	2.47	1.12	2.92	1.26	2.45	1.05	2.95	1.17

N = 75 2nd grade girls, 75 2nd grade boys, 55 5th grade girls, 95 5th grade boys.

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[1] Warner, W. L., Meeker, M. & Eells, K. *Social Class in America* *A Manual for Procedures for Measuring Social Status* Chicago: Science Research Associates, 1960.

TABLE 2

CORRELATION MATRIX FOR SOCIAL WORKER SUMMARY AND QUALITATIVE JUDGMENTS - 2nd GRADE GIRLS N = 75

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Social Worker Observations																							
1.	Genetic factors related to adjustment																							
2.	Physical defects related to adjustment	.17																						
3.	Physical conditions related to adjustment	-.17	.07																					
4.	Parent-child relations related to adjustment	.06	-.13	-.16																				
5.	Other adult-child relations related to adjustment	.18		-.09	-.18																			
6.	Problems in sibling relations	-.01	.09	.03	-.14	.02																		
7.	Peer relationships	.12	.14	.18	.04	-.08	.21																	
8.	Economic deprivation	.12	.14	.07	.09	-.01	.43	.84																
9.	Norm conflict	.13	-.01	-.08	.12	.03	.08	.39	.46															
10.	Social disorganization	.13	-.04	-.07	-.07	-.04	-.07	.13	.10	.19														
11.	Social mobility	.21	.05	-.21	.15	.05	.07	.19	.30	.61	.20													
12.	Deviations in physical, psychological or social factors	.20	-.00	-.00	.16	.01	.16	.38	.49	.81	.20	.62												
13.	Description of house	-.02	.09	.16	.41	-.26	-.17	.15	.09	.11	.11	-.10	.12											
14.	Rating of neighborhood	-.09	.10	.08	.32	-.23	-.20	.03	-.03	.15	.07	-.13	.11	.78										
15.	Source of income	-.01	-.09	.03	.20	-.16	-.17	.06	-.02	-.05	.14	-.23	-.01	.57	.35									
16.	Occupation code	.07	-.19	.10	.26	-.20	-.12	.07	-.01	-.08	.01	-.18	.02	.49	.34	.62								
	Social Worker Qualitative Judgments																							
17.	Serious physical problems?	-.04	.07	.18	.18	-.22	.10	.41	.38	.27	.13	.02	.24	.34	.25	.24	.06							
18.	Development shows deviant psychological patterns	-.12	.10	.14	.27	-.07	-.08	.25	.17	.36	.10	.29	.21	.39	.27	.13	.12	.44						
19.	Social environment conducive to poor development?	.14	.01	.27	.45	-.16	-.06	.33	.24	.35	.13	.21	.37	.72	.55	.37	.53	.38	.54					
20.	A family which would produce a child with problems?	-.08	.06	.15	.45	-.15	.10	.39	.30	.33	.05	.34	.29	.47	.28	.16	.26	.48	.73	.67				
21.	Serious personality problems?	.01	.16	.10	.26	.03	.01	.34	.25	.40	.16	.33	.33	.27	.23	-.01	.02	.50	.73	.52	.67			
22.	School adjustment problems?	-.02	.12	.22	.29	-.12	.09	.39	.32	.47	.18	.39	.47	.39	.34	.06	.05	.50	.72	.64	.67	.77		
23.	School learning problems?	.02	-.02	.27	.41	-.08	.09	.29	.23	.34	.08	.19	.37	.46	.28	.20	.32	.37	.52	.64	.69	.60	.65	

TABLE 3

CORRELATION MATRIX FOR SOCIAL WORKER SUMMARY AND QUALITATIVE JUDGMENTS - 2nd GRADE BOYS N = 75

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16 -	17	18	19	20	21	2
	Social Worker Observations																						
1.	Genetic factors related to adjustment																						
2.	Physical defects related to adjustment	.20																					
3.	Physical conditions related to adjustment	.10	-.10																				
4.	Parent-child relations related to adjustment	.06	-.21	.19																			
5.	Other adult-child relations related to adjustment	.19	-.08	.32	.44																		
6.	Problems in sibling relations	-.12	.02	.04	-.10	-.07																	
7.	Peer relationships	-.22	.12	-.16	-.24	-.20	.29																
8.	Economic deprivation	-.19	.07	-.15	-.15	-.22	.43	.86															
9.	Norm conflict	.02	-.05	-.08	-.02	.00	.05	.44	.49														
10.	Social disorganization	-.08	.07	-.17	-.22	-.10	.09	.38	.35	.31													
11.	Social mobility	-.06	-.29	.04	-.02	-.14	-.02	.36	.42	.67	.30												
12.	Deviations in physical, psychological or social factors	-.02	.03	-.08	-.01	-.00	.17	.52	.62	.81	.37	.61											
13.	Description of house	-.04	-.13	.27	.28	.22	-.06	-.03	.06	.14	.14	.27	.21										
14.	Rating of neighborhood	-.02	-.18	.19	.22	.15	.01	-.10	-.03	.02	.21	.16	.10	.72									
15.	Source of income	.07	-.22	.27	.26	.28	-.07	-.19	-.05	.04	-.16	.18	-.10	.52	.42								
16.	Occupation code	.04	-.30	.29	.21	.22	.02	-.06	.05	.08	.01	.19	.08	.53	.47	.56							
	Social Worker Qualitative Judgments																						
17.	Serious physical problems?	-.06	.11	.01	-.19	-.21	.25	.10	.17	-.03	.13	-.10	.04	.03	.12	.03	.08						
18.	Development shows deviant psychological patterns	.07	.09	.22	.16	.15	.04	.01	.07	.29	.06	.17	.36	.26	.15	.25	.21	.54					
19.	Social environment conducive to poor development?	.14	-.10	.31	.28	.13	-.07	-.17	-.09	.11	.02	.21	.16	.64	.51	.49	.54	.24	.57				
20.	A family which would produce a child with problems?	.17	.01	.22	.24	.17	-.13	-.10	-.04	.28	-.15	.15	.28	.36	.21	.34	.25	.28	.71	.59			
21.	Serious personality problems?	.16	.10	.12	.03	-.05	.04	-.01	.08	.22	-.03	.18	.26	.11	.00	.17	.07	.53	.80	.45	.68		
22.	School adjustment problems?	.03	.01	.35	.22	.21	.01	-.11	-.05	.19	-.09	.10	.26	.25	.16	.25	.23	.28	.71	.51	.72	.67	
23.	School learning problems?	.01	.08	.36	.18	.18	.04	.07	.08	.13	-.09	.07	.31	.29	.22	.13	.25	.21	.49	.37	.54	.45	.

TABLE 4

CORRELATION MATRIX FOR SOCIAL WORKER SUMMARY AND QUALITATIVE JUDGMENTS 5th GRADE GIRLS N = 55

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Social Worker Observations																							
1.	Genetic factors related to adjustment																							
2.	Physical defects related to adjustment	.19																						
3.	Physical conditions related to adjustment	.24	.01																					
4.	Parent-child relations related to adjustment	.02	-.17	.14																				
5.	Other adult-child relations related to adjustment	.38	-.03	-.09	-.08																			
6.	Problems in sibling relations	-.15	.28	.04	.17	-.05																		
7.	Peer relationships	-.09	.24	-.05	.19	.06	.37																	
8.	Economic deprivation	-.10	.21	-.02	.16	.07	.37	.96																
9.	Norm conflict	-.15	-.15	-.16	.21	-.00	.07	.47	.45															
10.	Social disorganisation	-.10	.09	-.23	-.17	.01	.01	.18	.17	.30														
11.	Social mobility	-.19	.18	-.18	-.05	-.05	.22	.23	.24	.49	.48													
12.	Deviations in physical, psychological or social factors	-.27	-.01	-.13	.06	.07	.28	.56	.51	.73	.30	.49												
13.	Description of house	.10	-.02	.17	.17	.07	.32	.09	.07	.14	-.06	.00	.10											
14.	Rating of neighborhood	.13	-.27	.12	.07	.08	.08	.02	-.01	.23	-.02	-.05	.14	.60										
15.	Source of income	.02	-.22	.26	.06	-.08	-.01	-.22	-.22	.05	-.07	-.05	-.00	.60	.43									
16.	Occupation code	-.06	-.33	.37	.25	-.20	.08	-.15	-.15	-.06	-.34	-.15	-.05	.38	.28	.56								
	Social Worker Qualitative Judgments																							
17.	Serious physical problems?	-.06	.11	-.26	.15	-.17	.26	.25	.22	.29	-.19	.21	.15	.15	.02	-.04	-.10							
18.	Development shows deviant psychological patterns	-.19	.08	-.08	.22	-.19	.08	.03	.00	.23	.17	.36	.21	.23	.21	.13	.02	.24						
19.	Social environment conducive to poor development?	.01	-.04	.10	.25	-.10	.18	.04	.02	.22	.08	.24	.17	.56	.36	.41	.26	.36	.73					
20.	A family which would produce a child with problems?	-.16	.03	-.11	.27	-.17	.00	.15	.14	.43	.12	.33	.26	.24	.19	.16	.11	.22	.72	.65				
21.	Serious personality problems?	-.21	-.01	-.04	.31	-.18	.03	.17	.14	.31	.07	.27	.30	.20	.26	.16	.12	.29	.89	.70	.69			
22.	School adjustment problems?	-.27	-.03	-.05	.05	-.05	-.05	.20	.23	.40	.26	.40	.30	.21	.22	.25	-.06	.13	.68	.52	.64	.65		
23.	School learning problems?	-.06	-.13	.39	.17	.03	-.14	.22	.24	.27	-.03	.02	.29	.16	.26	.27	.23	-.06	.39	.37	.40	.50	.46	

TABLE 5

CORRELATION MATRIX FOR SOCIAL WORKER SUMMARY AND QUALITATIVE JUDGMENTS - 5th GRADE BOYS N=95

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Social Worker Observations																							
1.	Genetic factors related to adjustment																							
2.	Physical defects related to adjustment	.28																						
3.	Physical conditions related to adjustment	-.07	-.11																					
4.	Parent-child relations related to adjustment	-.12	-.08	.04																				
5.	Other adult-child relations related to adjustment	-.03	-.00	-.08	.12																			
6.	Problems in sibling relations	-.04	-.04	-.11	.09	-.07																		
7.	Peer relationships	-.03	.23	.09	-.01	-.00	-.01																	
8.	Economic deprivation	-.01	.24	.06	-.01	-.02	.17	.97																
9.	Norm conflict	.08	.07	-.03	.13	.04	.03	.47	.46															
10.	Social disorganization	.01	.09	.06	-.15	.14	-.10	.12	.07	.18														
11.	Social mobility	-.01	.12	.04	.05	.11	-.02	.25	.24	.58	.12													
12.	Deviations in physical, psychological or social factors	-.02	.05	.06	.05	.19	.05	.50	.50	.77	.16	.43												
13.	Description of house	-.01	-.25	.21	-.09	.16	.03	-.22	-.23	-.08	.13	-.05	.01											
14.	Rating of neighborhood	.05	-.34	.20	-.09	.07	-.01	-.19	-.20	-.23	-.05	-.14	-.11	.65										
15.	Source of income	-.08	-.39	.13	-.08	.03	.11	-.25	-.22	-.18	-.14	-.21	-.06	.34	.30									
16.	Occupation code	-.16	-.34	.21	-.02	.16	.05	-.07	-.09	-.08	-.09	.03	.08	.56	.50	.57								
	Social Worker Qualitative Judgments																							
17.	Serious physical problems?	-.06	.14	.02	-.05	-.21	.13	.26	.26	-.00	.03	.01	-.05	-.05	.01	-.01	-.04							
18.	Development shows deviant psychological patterns	-.05	.16	-.10	.12		.22	.24	.28	.44	-.02	.32	.39	.10	-.08	-.16	.01	.36						
19.	Social environment conducive to poor development?	-.04	-.15	.16	-.11	.04	.13	-.05	-.03	.14	.05	.14	.18	.53	.41	.20	.43	.25	.49					
20.	A family which would produce a child with problems?	-.04	.12	.01	.12	.11	.12	.12	.11	.33	.14	.39	.27	.26	.04	-.18	.11	.32	.70	.51				
21.	Serious personality problems?	.03	.08	-.04	.07	.01	.13	.18	.21	.38	.06	.21	.34	.17	.03	-.07	.04	.42	.81	.45	.73			
22.	School adjustment problems?	.05	.23	-.05	-.04	.02	.14	.07	.07	.14	.05	.13	.15	.23	.06	-.05	-.04	.50	.66	.42	.64	.66		
23.	School learning problems?	-.12	-.03	.12	.07	.03	.20	.02	.07	.17	-.04	.13	.25	.16	-.05	.22	.21	.28	.48	.31	.24	.41	.29	

TABLE 6

FACTOR COEFFICIENTS FOR SOCIAL WORKER SUMMARY AND QUALITATIVE JUDGMENTS ON EACH FACTOR DIMENSION

	FACTOR 1				FACTOR 2				FACTOR 3				FACTOR 4				FACTOR
Variable	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 5th
1	-.048	-.117	-.195	.008	.134	.141	-.191	-.007	.069	-.012	.244	-.059	.258	.068	.145	-.078	.017
2	.102	.101	.097	.187	.149	.054	-.013	.119	.008	-.291	-.229	-.420	-.104	-.098	-.027	.189	-.214
3	.214	-.192	-.117	.060	.061	.284	-.047	-.079	.085	.265	.311	.327	-.289	.203	.634	.088	.073
4	.410	-.217	.199	.048	-.167	.208	.199	.068	.242	.278	.082	-.135	.064	.471	.124	-.125	.460
5	-.097	-.180	.063	.066	.003	.156	-.207	.019	-.265	.202	.107	.160	.062	.527	-.026	-.148	-.081
6	.051	.336	.352	.075	.456	-.038	-.102	.165	-.181	-.047	.256	.023	-.088	-.031	-.195	.086	.241
7	.402	.819	.845	.824	.679	-.131	-.123	-.117	.098	-.127	-.051	-.039	-.023	-.002	.049	.419	.109
8	.310	.846	.819	.825	.852	-.052	-.125	-.099	.082	-.040	-.068	-.052	.111	-.018	.103	.421	.077
9	.464	.715	.703	.725	.287	.238	.183	.136	-.031	-.036	.073	-.045	.678	.204	-.115	-.382	-.010
10	.137	.508	.302	.169	.027	-.104	.088	.010	.093	.152	-.113	.037	.211	-.146	-.241	-.099	-.460
11	.374	.587	.463	.479	.140	.132	.263	.153	-.326	.198	-.153	.001	.615	-.089	-.231	-.343	-.438
12	.404	.699	.769	.754	.357	.288	.064	.081	.038	.015	.046	.136	.712	.166	-.037	-.361	-.176
13	.481	.135	.129	-.165	-.149	.281	.232	.305	.777	.773	.792	.727	-.051	.072	-.112	-.061	.103
14	.342	.063	.120	-.235	-.230	.152	.233	.107	.625	.735	.588	.706	.038	-.005	.004	.104	-.040
15.	.131	-.173	-.124	-.225	-.115	.310	.261	-.062	.565	.591	.641	.513	-.086	.045	.137	-.080	-.096
16	.184	.027	-.132	-.056	-.102	.223	.106	.058	.653	.625	.559	.702	-.091	.064	.260	.000	.391
17	.557	.154	.289	.153	.235	.468	.174	.450	.157	-.059	.061	-.087	-.147	-.468	-.372	.457	.526
18	.821	.171	.149	.433	-.145	.869	.896	.783	-.054	.012	-.031	-.049	-.028	.001	-.035	-.034	-.014
19	.728	-.028	.143	.073	-.020	.629	.705	.567	.503	.623	.413	.562	.099	-.131	-.029	-.043	.033
20	.839	-.003	.312	.265	.074	.831	.752	.777	.083	.126	.017	.085	-.059	.036	-.061	-.033	.132
21	.843	.100	.293	.354	-.019	.842	.835	.810	-.168	-.171	-.003	-.003	-.011	-.247	.057	-.028	.171
22	.856	.002	.361	.137	.071	.828	.712	.772	.007	.032	.016	-.032	.102	.105	.038	.095	-.289
23	.751	.127	.327	.163	.019	.633	.433	.391	.132	.102	.134	.105	-.005	.169	.634	-.102	-.073

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* No fifth factor was found in the other samples.

Table 7

MEANS AND STANDARD DEVIATIONS FOR EACH VARIABLE USED IN THE FACTOR ANALYSES OF PSYCHOLOGICAL TEST DATA

No.	Variable	2nd girls		2nd boys		5th girls		5th boys	
		M.	S.D.	M.	S.D.	M.	S.D.	M.	S.D.
WISC SCALED SCORE:									
1.	Information	10.67	3.29	10.45	3.47	10.25	2.25	10.75	2.87
2.	Comprehension	9.16	2.77	10.32	3.28	9.98	2.92	10.26	2.46
3.	Similarities	10.12	2.70	10.23	3.17	10.70	3.01	11.54	2.70
4.	Picture completion	11.24	2.63	11.26	3.10	10.88	3.42	11.47	3.47
5.	Block design	11.03	2.61	10.43	2.91	10.93	2.64	10.89	2.62
RORSCHACH:									
6.	No. of rejections	0.31	0.83	0.29	0.98	0.56	0.98	0.35	0.97
7.	No. of W	7.30	5.37	8.70	3.61	8.73	5.26	9.34	4.66
8.	No. of D	9.59	5.36	9.24	5.83	9.54	6.33	8.99	5.90
9.	No. of d	2.61	2.18	2.83	2.74	2.48	3.28	2.79	2.37
10.	No. of Dd and S	2.36	2.13	2.54	2.35	2.18	1.62	2.34	2.39
11.	No. of M	2.14	1.30	2.60	1.65	2.51	1.77	3.08	2.34
12.	No. of FM	2.78	1.60	3.25	2.05	3.83	1.79	3.72	2.36
13.	No. of F-	3.44	3.49	3.11	2.17	3.10	2.20	2.69	1.82
14.	No. of FC	1.30	0.65	1.24	0.60	1.93	1.36	1.37	0.58
15.	No. of CF	2.26	1.18	1.81	0.96	2.84	1.78	2.02	1.23
16.	No. of populars	3.29	1.21	3.15	1.57	3.80	1.28	3.53	1.49
BENDER - total of the following deviations:									
17.	Figures decreased	2.33	2.05	2.12	1.81	1.79	1.91	1.91	1.72
18.	Figures increased	0.77	1.17	1.00	1.22	0.64	1.09	0.72	1.07
19.	Closure deviations	3.87	1.61	3.85	1.47	3.05	1.41	2.67	1.35
20.	Immature response	3.35	1.34	3.84	1.37	3.09	1.17	3.24	1.31
21.	Pointed or curved parts	0.67	0.72	0.47	0.68	0.25	0.54	0.30	0.54
22.	Curvature deviations	1.72	1.15	1.64	1.10	0.71	0.88	0.88	0.81
23.	Rotations	1.91	1.63	2.00	1.87	1.00	1.02	1.52	1.78
24.	Deviations in angulation	3.16	1.19	3.07	1.34	2.09	1.18	1.82	1.07
25.	Increased units	0.87	0.96	0.82	0.91	0.36	0.64	0.32	0.55
26.	Decreased units	1.19	0.74	1.36	0.94	0.70	0.75	0.54	0.72

N = 75 2nd grade girls, 75 2nd grade boys, 55 5th grade girls, 95 5th grade boys

TABLE 8

CORRELATION MATRIX FOR PSYCHOLOGISTS' TEST SCORES - SECOND GRADE GIRLS N = 75

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	WISC																										
1.	Information																										
2.	Comprehension	.32																									
3.	Similarities	.50	.31																								
4.	Picture Completion	.37	.27	.34																							
5.	Block Design	.39	.31	.38	.23																						
	RORSCHACH																										
6.	No. rejections	-.07	.08	.04	-.01	-.08																					
7.	Number of W	.22	.03	.21	.06	-.17	.21																				
8.	Number of D	-.16	-.18	-.14	.04	.04	-.26	-.32																			
9.	Number of d	-.08	-.08	-.03	.11	.06	-.08	-.16	.58																		
10.	Number of Dd & S	-.00	-.15	-.18	.12	.01	-.00	-.23	.36	.60																	
11.	Number of M	.09	-.02	.01	-.08	.14	-.12	.14	.06	.25	.01																
12.	Number of FM	.18	.15	.20	.19	.21	.00	.19	.00	.08	.07	.36															
13.	Number of F-	-.13	-.13	-.18	-.08	-.27	-.66	-.04	.37	.45	.46	.06	-.01														
14.	Number of FC	.18	.08	.10	.07	.24	-.03	-.03	.06	.43	.42	.34	.26	.18													
15.	Number of CF	.20	.10	.21	.20	.20	-.12	.20	.05	.31	.12	.51	.26	.06	.41												
16.	Number of Populars	.07	.20	.14	.12	.05	-.20	-.29	.29	.21	.14	-.02	.00	.07	.21	.03											
	BENDER																										
17.	No. figures decreased	-.18	-.06	-.13	-.19	-.01	.08	-.08	-.04	-.04	-.19	.05	-.05	-.14	-.09	.01	-.10										
18.	No. figures increased	-.04	-.21	-.17	-.06	.00	-.08	-.14	.21	.30	.38	-.01	-.04	.13	.11	-.07	.05	-.37									
19.	Deviations in closure	-.15	-.01	-.05	-.04	-.12	.13	-.01	-.06	-.01	-.03	-.08	.15	-.04	-.10	.04	-.02	.07	.05								
20.	Immature response	-.03	.15	-.07	.05	-.05	.06	.27	-.21	-.09	.03	-.04	.02	-.01	.04	.05	-.27	-.07	.09	.16							
21.	No. figures with pointed or curved subparts	-.10	-.30	-.11	-.16	-.33	.02	.12	.11	.14	.20	-.05	-.27	.15	-.02	-.01	.00	-.02	-.01	.03	-.07						
22.	Curvature deviation	-.18	-.16	-.05	-.21	-.35	.11	.12	.01	-.04	-.03	-.09	-.24	-.01	-.19	.06	.03	.05	-.12	.12	.05	.55					
23.	Deviation in rotation	-.11	-.04	-.13	-.08	.04	-.16	-.11	.12	.07	.03	.04	.19	-.08	.24	.14	.00	.07	.15	.04	.07	-.17	-.08				
24.	Deviations in angulation	-.13	-.10	-.12	.02	-.21	.08	.02	.07	.04	-.03	.01	.01	.09	-.01	.06	-.08	.02	.08	.35	.17	.12	.16	.04			
25.	Figures with increased no. of units	.04	-.20	-.12	-.00	-.27	.01	.18	.16	.15	.13	-.05	.01	.22	-.09	.13	-.00	-.03	.33	-.00	.11	.17	.11	.06	.18		
26.	Figures with decreased no. of units	-.02	-.09	-.01	.16	-.18	.05	.12	-.07	-.00	.02	.04	.17	-.11	-.02	.09	-.14	.24	-.18	.19	-.06	.14	.08	.05	.27	.11	

TABLE 9

CORRELATION MATRIX FOR PSYCHOLOGISTS' TEST SCORES - SECOND GRADE BOYS N = 75

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1.	WISC Information																										
2.	Comprehension	.49																									
3.	Similarities	.62	.39																								
4.	Picture Completion	.52	.32	.40																							
5.	Block Design	.28	.17	.23	.16																						
6.	RORSCHACH No. rejections	.11	-.09	-.06	-.02	.02																					
7.	Number of W	.13	.24	.17	.08	.09	-.36																				
8.	Number of D	.04	-.01	-.02	.08	.06	-.16	-.12																			
9.	Number of d	-.01	.01	.03	.09	.13	.01	-.20	.51																		
10.	Number of Dd & S	.08	.07	.03	.18	.16	.03	-.07	.39	.75																	
11.	Number of M	-.10	-.03	.01	.01	.07	-.12	.30	.16	.31	.22																
12.	Number of FM	.08	.20	.07	.12	.04	-.26	.29	.18	.01	.09	.35															
13.	Number of F-	.06	-.00	-.11	.10	-.04	.00	.10	-.00	.02	.33	.08	.23														
14.	Number of FC	.25	.37	.23	.24	.14	-.09	.30	.09	.36	.50	.38	.37	.37													
15.	Number of CF	-.04	.17	.01	-.14	.05	-.12	.13	.11	.28	.12	.30	.15	.01	.30												
16.	Number of Populars	.05	.10	.08	.20	.19	-.31	.29	.08	-.05	.06	.37	.35	.10	.22	-.02											
17.	BENDER No. figures decreased	-.04	-.06	.09	-.06	.01	.03	.19	.00	.10	-.13	.05	.16	-.25	.02	.10	-.07										
18.	No figures increased	.01	-.06	-.14	.01	-.13	-.00	-.12	.07	.01	.14	-.03	-.11	.26	-.11	-.15	-.00	-.42									
19.	Deviations in closure	.04	.13	-.05	-.11	-.02	-.13	.14	.01	.04	-.02	.02	-.00	.03	.10	.25	.10	-.08	.07								
20.	Immature response	-.20	.10	.02	.01	.00	-.06	.15	-.14	-.04	-.16	.05	.03	-.14	.08	.12	-.03	.10	-.09	.08							
21.	No. figures with pointed or curved subparts	.08	.11	-.04	-.20	.05	-.11	.11	-.06	-.11	-.11	.01	-.14	.02	-.06	.10	-.01	.08	.07	.22	-.24						
22.	Curvature deviation	.15	.03	.00	.05	-.03	.03	.06	-.05	-.01	-.09	-.07	-.08	-.03	-.06	.05	.08	.33	.02	.23	-.14	.52					
23.	Deviation in rotation	-.31	-.13	-.25	.10	-.14	-.03	.11	.14	.01	.01	-.10	-.02	.09	.14	-.06	-.15	.08	-.04	-.16	.06	-.02	.01				
24.	Deviations in angulation	-.16	-.10	-.20	-.06	-.34	-.12	-.00	-.11	-.08	-.11	.07	.07	-.06	-.07	-.04	-.01	-.17	.11	.18	.17	.01	-.04	.11			
25.	Figures with increased no. of units	-.23	.04	-.20	-.16	-.26	-.08	.08	.05	.06	-.06	-.06	.12	.14	.10	.13	-.08	-.04	-.01	.11	.18	-.07	.12	.21	.10		
26.	Figures with decreased no. of units	-.01	-.03	-.14	-.06	-.04	.09	.15	.05	.06	.08	-.00	-.11	-.17	-.02	.18	-.01	.40	.06	.19	.14	.24	.40	.15	-.04	.03	

TABLE 10

CORRELATION MATRIX FOR PSYCHOLOGISTS' TEST SCORES - FIFTH GRADE GIRLS N = 55

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	WISC																										
1.	Information																										
2.	Comprehension	.53																									
3.	Similarities	.56	.54																								
4.	Picture Completion	.45	.36	.32																							
5.	Block Design	.33	.20	.35	.41																						
	RORSCHACH																										
6.	No. rejections	-.47	-.40	-.35	-.24	-.13																					
7.	Number of W	.24	.30	.02	.22	.17	-.42																				
8.	Number of D	.21	.02	-.00	.13	.17	-.35	.10																			
9.	Number of d	.01	-.03	.06	-.12	.11	-.02	-.15	.51																		
10.	Number of Dd & S	.07	-.06	.01	.07	.11	-.20	.13	.52	.61																	
11.	Number of M	.20	.21	.09	.14	.07	-.26	.53	.21	-.02	.34																
12.	Number of FM	.38	.29	.21	.33	.23	-.38	.55	.31	.17	.37	.43															
13.	Number of F-	-.03	-.03	-.28	.13	-.04	-.20	.46	.24	.18	.57	.48	.45														
14.	Number of FC	.08	.07	-.09	.07	.08	-.10	.30	.27	.40	.40	.33	.35	.45													
15.	Number of CF	.20	.08	-.02	.10	.21	-.11	.47	.18	.44	.48	.38	.47	.58	.60												
16.	Number of Populars	.11	-.06	.04	.03	.07	-.24	.10	.51	.33	.25	.23	.36	.14	.38	.15											
	BENDER																										
17.	No. figures decreased	-.27	-.25	-.10	-.11	-.13	.14	-.19	-.12	-.03	.01	-.30	-,29	-.02	-,20	-,22	.01										
18.	No. figures increased	-.12	-.08	-.15	.06	-.03	-.04	.26	.20	.04	.16	.36	.26	.25	.09	.19	-.00	-.38									
19.	Deviations in closure	-.14	-.13	-.04	-.04	-.13	.08	.07	-.16	-.19	-.03	.08	.01	.15	-.12	-.09	-.26	.06	.06								
20.	Immature response	-.20	-.13	-.20	.01	-.17	.11	.13	-.08	-.11	.00	.22	.13	.11	-.08	.04	-.20	.05	.35	.30							
21.	No. figures with pointed or curved subparts	-.11	-.18	-.24	-.17	-.16	.03	.09	.09	.04	.04	-.16	.15	.16	.17	.11	.14	.14	-.12	.17	.05						
22.	Curvature deviation	-.17	-.06	-.17	-.36	-.35	.03	.11	.04	.07	.05	-.13	.12	.13	.09	.04	.03	.02	-.07	.13	.16	.67					
23.	Deviation in rotation	-.28	-.28	-.20	-.14	-.27	.25	-.17	-.06	-.02	-.05	-.10	-.23	.01	-.05	-.13	.01	.34	.05	.05	.27	-.03	.18				
24.	Deviations in angulation	-.16	-.22	-.07	-.28	-.27	.18	-.05	-.17	.03	-.04	-.17	-.06	-.02	-.12	-.15	-.02	.35	.02	.13	.08	.02	-.01	.24			
25.	Figures with increased no. of units	.00	-.03	.02	-.18	.10	-.12	.02	.25	.38	.30	-.09	.01	.09	.05	.09	.17	-.04	.11	-.08	.03	.00	.21	.22	.19		
26.	Figures with decreased no. of units	-.01	-.16	-.12	-.13	-.04	-.11	.09	-.09	-.12	.07	.05	-.05	.11	-.01	.03	.04	.38	-.28	.22	-.03	.05	.03	.09	.17	.00	

TABLE 11

CORRELATION MATRIX FOR PSYCHOLOGISTS' TEST SCORES - FIFTH GRADE BOYS N = 95

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	WISC																										
1.	Information																										
2.	Comprehension	.46																									
3.	Similarities	.67	.47																								
4.	Picture Completion	.31	.30	.49																							
5.	Block Design	.37	.13	.36	.42																						
	RORSCHACH																										
6.	No. rejections	-.26	-.15	-.30	-.29	-.09																					
7.	Number of W	.30	.31	.39	.20	.22	-.32																				
8.	Number of D	.12	.01	.08	.16	-.03	-.27	.07																			
9.	Number of d	.04	-.08	-.05	-.03	-.09	.01	-.11	.36																		
10.	Number of Dd & S	.05	.05	.20	.15	.00	-.09	.11	.32	.38																	
11.	Number of M	.83	.21	.15	.18	.20	-.22	.38	.28	.15	.14																
12.	Number of FM	.21	.22	.24	.23	.18	-.29	.53	.34	.10	.13	.53															
13.	Number of F-	-.07	.04	-.03	.02	-.10	-.01	.19	.07	.32	.43	.10	.22														
14.	Number of FC	.07	.09	.18	.01	-.02	-.04	.26	.26	.59	.56	.35	.28	.42													
15.	Number of CF	.13	.14	.21	.11	.08	-.04	.42	.13	.36	.27	.29	.26	.34	.53												
16.	Number of Populars	.02	.19	.07	.15	.08	-.18	.09	.41	.02	.27	.28	.35	.01	.17	.05											
	BENDER																										
17.	No. Figures decreased	.08	.14	-.05	-.03	-.18	-.15	-.12	.05	.07	-.05	-.07	.02	.01	-.02	-.04	-.00										
18.	No. figures increased	.05	-.02	.00	.07	-.02	-.06	.12	.03	-.05	-.02	-.14	.07	.20	.05	-.02	-.07	-.38									
19.	Deviations in closure	-.02	-.16	-.04	-.20	-.17	-.03	.17	.14	.00	.18	.04	.11	.19	.08	.03	-.06	-.04	.22								
20.	Immature response	-.01	.14	.04	.09	-.09	-.13	-.06	-.02	.04	.12	-.03	-.10	.06	.07	-.07	.15	.09	.03	.18							
21.	No. figures with pointed or curved subparts	-.03	.11	-.13	-.02	-.11	-.12	.03	.13	.15	.01	-.05	.00	.10	-.08	.03	-.02	-.00	.13	.18	.13						
22.	Curvature deviation	-.04	-.01	-.17	-.07	-.15	.01	-.20	.03	.08	.05	-.15	-.05	.14	-.10	-.09	-.16	.07	.19	.13	.07	.51					
23.	Deviation in rotation	.07	.23	.00	-.06	-.06	-.07	.20	-.03	-.03	-.16	.12	.24	.19	-.00	.12	-.12	.03	.13	.04	.12	.02	.15				
24.	Deviations in angulation	.09	.23	.02	-.06	-.08	-.13	.00	-.06	.01	-.02	-.00	.06	.01	-.09	.03	-.13	.14	.05	.04	.07	.25	.35	.32			
25.	Figures with increased no. of units	-.07	.08	-.01	.06	-.07	-.02	.06	.01	-.04	.02	-.09	.13	.04	.02	.15	.22	.09	.14	-.04	.08	.02	.02	-.14	.03		
26.	Figures with decreased no. of units	-.12	.00	-.03	.04	.03	.11	.07	-.17	-.14	.02	-.07	-.02	.14	-.02	.21	-.06	-.02	.02	.03	.03	.14	.08	.05	-.09	.35	

TABLE 12

FACTOR COEFFICIENTS FOR PSYCHOLOGICAL TEST DATA ON EACH FACTOR DIMENSION

Variable	FACTOR 1				FACTOR 2				FACTOR 3				FACTOR 4				FACTOR 5				FACTOR 6				FACTOR 7			
	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th
1	-.139	.051	.112	.683	-.334	.804	-.192	.002	.175	.124	.723	.119	.567	-.079	-.031	-.065	-.101	-.093	-.019	.094	-.050	-.038	.014	.061	NONE EXTRACTED	-.058	-.138	-.103
2	-.197	.033	.019	.512	-.375	.590	-.149	.012	.041	.064	.691	.265	.306	-.031	.074	.177	.070	.100	-.143	.178	.185	-.274	-.199	-.182		.116	-.075	-.037
3	-.192	.020	-.134	.766	-.257	.697	-.227	.077	.193	-.065	.693	-.042	.564	.153	-.180	-.059	-.032	-.038	.020	.029	.085	.076	-.108	-.063		.068	.052	-.038
4	.067	.161	.126	.617	-.322	.605	-.334	.027	.079	-.124	.416	.013	.479	-.044	.073	.044	.133	.031	-.041	-.029	-.034	.236	-.009	.138		-.126	-.217	.243
5	-.055	.156	.124	.581	-.525	.296	-.340	-.106	.135	.019	.286	-.090	.280	.104	-.089	.081	-.106	.064	-.013	-.094	.187	.305	.043	-.136		.181	.017	-.102
6	-.146	-.057	-.210	-.355	.126	-.017	.068	-.034	-.059	-.062	-.585	-.187	.034	.026	-.137	-.247	.169	-.461	-.142	-.105	-.348	-.266	-.293	-.286		-.275	-.162	-.138
7	-.274	-.173	.474	.419	.254	.244	.045	.144	.467	.081	.339	-.036	.271	.191	.565	.479	-.156	.510	.019	-.187	-.501	-.153	-.027	-.517		.021	.176	-.242
8	.636	.606	.424	.123	-.038	-.024	.007	.367	-.090	.003	.190	.050	-.056	.001	-.287	.290	.031	.057	-.090	.027	.205	.359	.578	.364		.210	.095	.105
9	.793	.853	.527	-.048	-.083	-.038	-.030	.645	.165	.037	-.029	.088	.033	.129	-.644	-.044	.014	-.101	-.076	.130	.013	-.090	.148	.149		.098	.105	-.092
10	.687	.769	.674	.151	-.011	.062	-.063	.681	-.045	-.040	.012	.002	.082	-.130	-.268	-.138	-.036	.043	.123	.027	-.012	-.269	.139	.291		-.308	.252	.263
11	.191	.312	.531	.233	-.161	-.071	-.270	.260	.669	.011	.179	-.090	-.206	.089	.489	.628	-.194	.610	-.095	.035	.100	-.008	.175	-.064		.034	-.071	-.180
12	.055	.125	.570	.326	-.383	.161	.068	.254	.441	-.151	.441	.044	.021	.228	.191	.628	.188	.527	-.142	-.035	-.112	.044	.156	.064		.048	-.056	.180
13	.625	.156	.743	-.068	.132	.002	.054	.503	-.031	.012	-.097	.094	-.060	-.371	.294	.046	-.009	.284	.080	-.123	-.206	-.569	-.021	-.253		-.564	.090	-.045
14	.397	.423	.674	.094	-.282	.362	.044	.779	.398	-.044	.018	-.183	.009	.126	-.042	.135	-.093	.402	-.125	-.034	.164	-.290	.107	-.187		.031	-.312	-.125
15	.196	.232	.775	.201	-.108	-.020	-.036	.545	.589	.140	.067	-.015	.184	.181	.016	.120	.006	.187	-.077	.019	.012	-.437	-.225	-.363		.373	-.030	.105
16	.259	.041	.319	.120	-.044	.157	.047	.170	-.070	.043	.108	-.159	.244	-.059	-.106	.374	-.032	.586	.085	.029	.501	.290	.578	.474		.031	-.095	.541
17	-.151	-.010	-.150	-.068	.038	-.025	.121	.004	.056	.289	-.243	.105	-.329	.668	-.141	-.008	.009	.024	.626	.634	.088	-.004	.017	.097		-.184	-.045	.173
18	.374	.097	.244	.042	-.116	-.078	-.159	.065	-.203	.077	-.173	.204	-.117	-.668	.313	-.097	.201	.024	-.541	-.634	-.177	-.004	.169	.097		-.184	.398	.173
19	-.050	.013	-.030	-.162	.151	.002	.199	.176	.134	.319	-.097	.158	-.108	-.160	.264	.130	.538	.152	.171	-.205	.063	-.137	-.235	.133		.373	.195	.045
20	-.105	-.154	.023	.015	.029	-.013	.127	.106	.051	-.283	-.208	.147	-.044	.171	.348	-.152	.280	.073	-.056	.072	-.484	-.217	-.090	.128		.280	.433	.197
21	.219	-.125	.165	-.108	.682	-.007	.809	.072	.013	.715	-.026	.618	.185	-.108	-.004	.003	-.089	.031	.053	-.062	-.013	-.155	.055	.079		-.099	-.168	.153
22	-.023	-.071	.111	-.165	.711	.092	.809	.071	.122	.715	.026	.696	.094	.108	.004	-.087	-.017	-.031	-.053	-.041	.200	.155	-.055	.121		.099	.168	.110
23	.056	.069	-.079	-.017	-.160	-.221	.104	.002	.136	.017	-.345	.271	-.319	.105	-.005	.297	.053	-.052	.245	-.079	.086	-.479	.097	-.312		-.680	.469	-.364
24	.062	-.136	-.116	-.009	.248	-.180	.027	-.032	.127	-.028	-.216	.500	-.037	-.208	-.049	.084	.538	.154	.353	.102	-.063	-.161	-.047	-.201		.050	.569	-.263
25	.244	.024	.185	-.033	.255	-.202	.100	.013	.090	.048	.052	.032	.104	-.021	-.320	.047	.062	.071	-.013	-.042	-.199	-.395	.121	-.208		-.054	.398	.485
26	-.059	.012	.073	-.032	.216	-.093	.040	.002	.270	.456	-.059	.067	.116	.191	.162	-.051	.294	-.003	.626	-.025	-.045	-.013	-.017	-.527		.188	.045	.485

Table 13

MEANS AND STANDARD DEVIATIONS FOR EACH VARIABLE USED IN THE FACTOR ANALYSIS OF PSYCHOLOGICAL OBSERVATIONS AND QUALITATIVE JUDGMENTS

No. Variable	2nd girls		2nd boys		5th girls		5th boys	
	M.	S.D.	M.	S.D.	M.	S.D.	M.	S.D.
CLINICAL IMPRESSION:								
1. Good concentration	1.00	0.49	1.04	0.35	1.09	0.39	1.09	0.33
2. Good control	0.72	0.50	0.65	0.48	0.88	0.38	0.82	0.38
3. Good frustration tolerance	0.60	0.52	0.68	0.52	0.84	0.37	0.81	0.39
4. Conforming behavior	0.81	0.45	0.86	0.38	0.93	0.37	0.98	0.29
5. Relaxed	0.75	0.63	0.72	0.56	0.70	0.50	0.67	0.53
ATTITUDES TOWARD EXAMINER:								
6. Shyness	0.40	0.65	0.19	0.48	0.23	0.53	0.19	0.46
7. Brashness	0.13	0.41	0.27	0.55	0.14	0.40	0.19	0.51
8. Dependency	0.67	0.74	0.41	0.54	0.36	0.61	0.25	0.50
9. Defensiveness	0.43	0.68	0.38	0.59	0.25	0.51	0.32	0.51
ATTITUDES TOWARD TESTS:								
10. Over-impulsivity	0.21	0.57	0.28	0.60	0.11	0.41	0.21	0.48
11. Giving up	0.53	0.77	0.19	0.48	0.21	0.52	0.14	0.40
12. Persistence	0.09	0.29	0.23	0.48	0.23	0.46	0.31	0.55
13. Over reaction to success and/or failure	0.25	0.52	0.35	0.65	0.21	0.49	0.36	0.58
14. Attention and concentration difficulties	0.47	0.74	0.47	0.70	0.25	0.54	0.26	0.58
15. Personal reference	0.25	0.57	0.32	0.64	0.09	0.29	0.22	0.50
16. Blocking	0.76	0.73	0.43	0.70	0.30	0.56	0.30	0.54
QUALITATIVE JUDGMENTS:								
17. Poor intellectual functioning	3.05	1.13	2.80	1.23	2.95	1.25	2.82	1.15
18. Severe perceptual problems	2.93	1.15	3.09	1.22	2.84	1.19	3.06	1.12
19. Severe personality disturbance	3.04	1.24	3.26	1.08	3.04	0.98	3.25	1.15
20. Problems relating to teacher	3.03	1.17	3.08	1.08	2.75	1.11	3.16	1.13
21. Cannot meet learning tasks effectively	3.20	1.24	3.07	1.26	2.98	1.16	2.94	1.15
22. Poor creative potential	3.05	1.18	3.07	1.18	2.88	0.96	2.76	1.21
23. Poor school adjustment	3.11	1.17	2.04	1.11	2.84	1.10	3.20	1.14
24. Poor school achievement	3.07	1.20	2.95	1.20	3.00	1.25	2.96	1.23
25. Rating on WISC	3.07	1.11	2.78	1.17	3.00	1.18	2.83	1.21
26. Rating on Bender	3.00	1.17	2.15	1.16	2.82	1.26	3.15	1.20
27. Rating of Rorschach	3.08	1.23	3.31	1.10	3.09	1.02	3.11	1.22

N = 75 2nd grade girls, 75 2nd grade boys, 55 5th grade girls, 95 5th grade boys

TABLE 14

CORRELATION MATRIX FOR PSYCHOLOGISTS' OBSERVATIONAL DATA AND QUALITATIVE JUDGMENTS
SECOND GRADE GIRLS N = 75

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Clinical Impression																										
1.	Cooperative																										
2.	Good control	-.05																									
3.	Frustration tolerance	.05	.75																								
4.	Conforming behavior	.18	.65	.54																							
5.	Relaxed	.43	-.05	-.02	.16																						
	Attitudes toward Examiner																										
6.	Shyness	-.25	.06	.04	.07	-.40																					
7.	Brashness	-.26	-.33	-.31	-.37	-.02	-.20																				
8.	Dependency	-.15	-.11	-.14	-.03	-.24	.17	.19																			
9.	Defensiveness	-.40	-.04	-.20	-.13	-.31	.19	.23	.37																		
	Attitudes toward test & test materials																										
10.	Over-impulsivity	-.29	-.25	-.34	-.36	-.14	-.19	.84	.20	.21																	
11.	Giving-up	-.32	.04	-.13	.02	-.38	.32	.03	.31	.46	.07																
12.	Persistence	.28	-.09	-.11	-.07	.27	-.13	-.10	-.23	-.13	-.12	-.22															
13.	Over-reactions to success &/or failure	-.21	-.03	-.12	-.20	-.21	.13	.09	.05	.11	.13	.13	-.07														
14.	Attention & concentration difficulties	-.26	-.44	-.53	-.30	-.12	.03	.63	.41	.38	.62	.31	-.14	.14													
15.	Personal reference	-.19	-.17	-.15	-.23	.07	-.09	.60	.01	-.00	.53	-.10	.02	.19	.36												
16.	Blocking	-.45	.07	-.04	.03	-.28	.29	.02	.45	.51	-.01	.54	-.27	.06	.31	-.21											
	Psychologist's qualitative judgments																										
17.	Poor intellectual functioning	-.19	-.25	-.17	-.16	-.24	.10	.24	.15	.23	.21	.33	.03	.05	.27	.15	.15										
18.	Severe perceptual difficulties	-.36	-.22	-.27	-.23	-.15	.27	.33	.27	.36	.31	.25	.02	.19	.37	.27	.11	.50									
19.	Severe personality disturbance	-.29	-.02	-.04	-.06	-.31	.38	.09	.25	.27	.19	.22	-.12	.21	.26	.02	.19	.38	.48								
20.	Problems relating to classroom teacher	-.35	-.24	-.29	-.34	-.41	.20	.35	.23	.39	.37	.38	-.05	.10	.39	.23	.20	.66	.59	.50							
21.	Meets learning tasks effectively	-.26	-.34	-.37	-.34	-.26	.21	.37	.19	.28	.35	.36	.02	.15	.33	.15	.17	.79	.62	.44	.67						
22.	Has creative potential	-.39	-.04	-.14	-.03	-.36	.25	.23	.24	.39	.32	.32	-.09	.13	.36	-.00	.31	.62	.53	.64	.65	.63					
23.	Has poor school adjustment	-.35	-.31	-.30	-.36	-.48	.41	.41	.26	.38	.40	.38	-.15	.17	.45	.22	.22	.61	.59	.61	.85	.72	.65				
24.	Has poor school achievement	-.25	-.30	-.30	-.30	-.29	.15	.17	.16	.31	.19	.36	.10	.04	.28	.01	.20	.83	.52	.41	.72	.82	.63	.65			
25.	Over-all rating of WISC	-.24	-.25	-.16	-.16	-.28	.18	.13	.24	.25	.12	.39	.02	.06	.26	.02	.23	.92	.45	.37	.61	.75	.56	.56	.86		
26.	Over-all rating of Bender	-.33	-.07	-.09	-.10	-.16	.21	.19	.28	.30	.28	.21	-.00	.04	.28	.08	.19	.35	.78	.45	.46	.41	.46	.44	.41	.39	
27.	Over-all rating of Rorschach	-.27	-.03	-.10	-.05	-.45	.31	.14	.19	.33	.20	.28	-.13	.24	.22	-.01	.13	.47	.51	.82	.60	.49	.74	.69	.44	.39	.47

TABLE 15

CORRELATION MATRIX FOR PSYCHOLOGISTS' OBSERVATIONAL DATA AND QUALITATIVE JUDGMENTS
SECOND GRADE BOYS N = 75

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
	Clinical Impression																								
1.	Cooperative																								
2.	Good control	.00																							
3.	Frustration tolerance	.07	.73																						
4.	Conforming behavior	.45	.41	.39																					
5.	Relaxed	.20	.44	.33	.27																				
	Attitudes toward Examiner																								
6.	Shyness	.03	.05	.03	.14	-.20																			
7.	Brashness	-.27	-.41	-.26	-.60	-.15	-.19																		
8.	Dependency	-.23	.13	.03	.07	-.24	.43	-.14																	
9.	Defensiveness	-.34	-.20	-.08	-.38	-.42	-.06	.44	.15																
	Attitudes toward test & test materials																								
10.	Over-impulsivity	-.25	-.40	-.26	-.48	-.12	-.09	.74	-.06	.35															
11.	Giving up	-.37	-.12	-.24	-.38	-.05	-.10	.11	.17	.13	.05														
12.	Persistence	.11	.06	-.03	.10	.09	.05	-.13	-.10	-.21	-.13	-.01													
13.	Over-reactions to success &/or failure	-.24	-.39	-.34	-.36	-.36	.00	.42	-.02	.33	.30	.13	.00												
14.	Attention & concentration difficulties	-.36	-.31	-.24	-.42	-.14	.13	.51	.17	.19	.45	.57	-.12	.20											
15.	Personal reference	-.18	-.20	-.17	-.43	-.08	-.15	.63	-.07	.29	.32	.02	-.15	.28	.29										
16.	Blocking	-.30	.05	.01	.02	-.21	.20	-.09	.29	.16	-.10	.44	.15	-.01	.30	-.13									
	Psychologist's qualitative judgments																								
17.	Poor intellectual functioning	-.17	-.01	-.08	-.09	-.06	.16	.18	.20	.13	.15	.31	-.06	.09	.33	.14	.18								
18.	Severe perceptual difficulties	-.07	-.17	-.14	-.15	-.16	.11	.26	.08	.23	.24	.13	-.18	.15	.20	.17	.09	.52							
19.	Severe personality disturbance	-.32	-.11	-.07	-.28	-.31	-.02	.34	.05	.38	.30	.22	-.22	.26	.29	.21	.09	.20	.40						
20.	Problems relating to classroom teacher	-.34	-.18	-.29	-.44	-.28	.20	.44	.24	.32	.42	.07	-.14	.37	.36	.32	.04	.40	.55	.51					
21.	Meets learning tasks effectively	-.22	-.19	-.19	-.29	-.20	.18	.32	.12	.26	.44	.22	-.09	.29	.30	.17	.06	.73	.62	.41	.63				
22.	Has creative potential	-.21	-.10	-.14	-.28	-.24	.19	.24	.23	.26	.24	.26	-.10	.18	.34	.19	.18	.44	.48	.58	.55	.54			
23.	Has poor school adjustment	-.43	-.18	-.23	-.37	-.33	.19	.42	.31	.37	.39	.16	-.17	.28	.43	.31	.15	.46	.53	.56	.84	.61	.56		
24.	Has poor school achievement	-.19	-.08	-.11	-.17	-.12	.16	.19	.20	.14	.23	.30	-.03	.22	.24	.16	.16	.87	.54	.23	.48	.78	.50	.48	
25.	Over-all rating of WISC	-.15	-.06	-.09	-.07	-.05	-.22	.17	.22	.12	.16	.29	.02	.15	.37	.15	.16	.90	.48	.12	.37	.70	.43	.44	.82
26.	Over-all rating of Bender	-.08	-.20	-.19	-.14	-.23	.07	.17	.12	.24	.19	.09	-.23	.17	.15	.14	.00	.41	.84	.46	.52	.61	.44	.60	.44
27.	Over-all rating of Rorschach	-.28	-.05	-.11	-.26	-.21	.02	.28	.13	.26	.33	.27	-.13	.23	.33	.13	.18	.22	.38	.84	.53	.45	.62	.62	.25

TABLE 16

CORRELATION MATRIX FOR PSYCHOLOGISTS' OBSERVATIONAL DATA AND QUALITATIVE JUDGMENTS
FIFTH GRADE GIRLS N = 55

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
	Clinical Impression																										
1.	Cooperative																										
2.	Good control	-.05																									
3.	Frustration tolerance	.10	.62																								
4.	Conforming behavior	.29	.19	.18																							
5.	Relaxed	.23	.37	.52	.27																						
	Attitude toward Examiner																										
6.	Shyness	.07	-.30	-.45	.17	-.41																					
7.	Brashness	.03	-.12	-.09	-.41	-.32	-.07																				
8.	Dependency	.09	-.27	-.38	.19	-.29	.40	.16																			
9.	Defensiveness	-.38	-.02	-.17	-.28	-.34	.05	.26	-.00																		
	Attitudes toward test & test materials																										
10.	Over-impulsivity	.05	-.49	-.36	-.07	-.37	.21	.35	.13	.39																	
11.	Giving up	-.35	-.04	-.38	-.10	-.37	.20	.11	.32	.40	.06																
12.	Persistence	.48	-.04	.01	.10	-.00	-.07	.11	-.17	-.09	.25	-.20															
13.	Over-reactions to success &/or failure	.09	-.14	-.11	.28	-.03	.15	-.07	.10	-.00	.24	-.11	.33														
14.	Attention & concentration difficulties	.06	-.37	-.34	.27	-.31	.35	.17	.54	.16	.28	.50	.05	.07													
15.	Personal reference	-.07	.10	.14	.06	-.06	-.02	.05	.02	-.15	-.08	-.13	.11	.50	-.14												
16.	Blocking	-.37	.01	-.28	-.07	-.37	.18	.13	.31	.42	.01	.87	-.27	-.11	.39	-.06											
	Psychologist's qualitative judgments																										
17.	Poor intellectual functioning	-.14	-.05	-.10	-.16	-.11	.02	.20	.31	.16	-.13	.37	-.10	-.22	.28	-.09	.38										
18.	Severe perceptual difficulties	-.12	-.16	-.18	-.11	-.17	-.03	.31	.23	.10	.15	.17	.07	-.00	.23	.15	.23	.58									
19.	Severe personality disturbance	-.29	-.23	-.38	-.04	-.20	.32	-.01	.34	.09	-.01	.26	-.25	.24	.32	.18	.24	.41	.39								
20.	Problems relating to classroom teacher	-.20	-.37	-.41	-.17	-.27	.19	.20	.45	.33	.26	.40	-.03	.10	.43	.07	.41	.52	.46	.57							
21.	Meets learning tasks effectively	-.23	-.13	-.30	-.21	-.2[illegible]	.24	.08	.31	.31	.04	.45	-.09	.04	.26	.00	.42	.80	.52	.50	.62						
22.	Has creative potential	-.21	.01	-.01	-.02	.03	-.01	-.09	.20	.06	-.10	.41	-.22	-.09	.23	-.15	.40	.68	.36	.48	.47	.59					
23.	Has poor school adjustment	-.26	-.39	-.51	-.25	-.35	.34	.22	.41	.30	.28	.40	.00	.06	.46	-.01	.37	.58	.55	.63	.86	.73	.44				
24.	Has poor school achievement	-.29	-.07	-.19	-.23	-.26	.16	.21	.33	.28	-.07	.49	-.12	-.17	.31	-.05	.45	.89	.57	.46	.58	.84	.62	.67			
25.	Over-all rating of WISC	-.12	-.08	-.25	-.16	-.15	.17	.19	.35	.18	-.11	.37	-.13	-.12	.28	-.11	.38	.91	.48	.45	.49	.85	.63	.61	.89		
26.	Over-all rating of Bender	-.15	-.16	-.22	-.22	-.23	-.04	.34	.20	-.01	.11	.25	-.08	.00	.17	.09	.33	.38	.73	.31	.34	.32	.28	.38	.43	.30	
27.	Over-all rating of Rorschach	-.38	-.29	-.44	-.17	-.26	.22	.06	.26	.13	.02	.26	-.23	.10	.25	.22	.26	.40	.48	.87	.57	.48	.48	.63	.46	.44	.32

TABLE 17

CORRELATION MATRIX FOR PSYCHOLOGISTS' OBSERVATIONAL DATA AND QUALITATIVE JUDGMENTS
FIFTH GRADE BOYS N = 95

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	2
	Clinical Impression																										
1.	Cooperative																										
2.	Good control	.13																									
3.	Frustration tolerance	.14	.62																								
4.	Conforming behavior	.24	.35	.15																							
5.	Relaxed	.06	.17	.15	.02																						
	Attitudes toward Examiner																										
6.	Shyness	.16	.13	.02	.26	-.38																					
7.	Brashness	-.11	-.64	-.45	-.33	-.00	-.15																				
8.	Dependency	-.14	.01	-.13	.18	-.31	.16	-.02																			
9.	Defensiveness	-.25	-.29	-.22	-.03	-.37	.14	.33	.34																		
	Attitudes toward test & test materials																										
10.	Over-impulsivity	-.13	-.43	-.41	-.20	-.01	-.18	.66	.04	.15																	
11.	Giving up	-.26	-.12	-.31	-.16	-.23	.03	.03	.09	.09	.02																
12.	Persistence	.30	-.18	-.02	-.02	-.04	.02	-.02	-.06	-.14	.07	-.15															
13.	Over-reactions to success &/or failure	-.02	-.08	-.25	.17	-.11	-.02	.05	.40	.34	.10	-.03	.10														
14.	Attention & concentration difficulties	-.13	-.40	-.52	.09	-.32	.17	.26	.24	.42	.29	.34	.14	.31													
15.	Personal reference	-.13	-.39	-.32	-.18	.04	-.09	.45	.11	.29	.42	-.04	-.02	.08	.13												
16.	Blocking	-.22	-.19	-.22	-.03	-.41	.02	-.02	.14	.29	.08	.58	-.11	.08	.51	-.09											
	Psychologist's qualitative judgments																										
17.	Poor intellectual functioning	-.12	-.09	-.10	-.20	-.08	-.04	-.13	-.18	.20	.18	.23	-.08	.07	.16	.14	.24										
18.	Severe perceptual difficulties	-.16	-.29	-.26	-.09	.02	.04	.31	.12	.17	.27	.10	.09	.13	.26	.03	.19	.45									
19.	Severe personality disturbance	-.09	-.14	-.24	-.02	-.19	-.05	.20	.22	.06	.28	.15	.09	.08	.29	.03	.13	.30	.57								
20.	Problems relating to classroom teacher	-.18	-.22	-.31	-.15	-.18	.12	.36	.35	.34	.34	.25	-.10	.22	.31	.23	.14	.59	.47	.47							
21.	Meets learning tasks effectively	-.12	-.24	-.26	-.10	-.07	.10	.23	.21	.23	.35	.25	-.05	.08	.24	.15	.30	.79	.50	.41	.57						
22.	Has creative potential	.06	[illegible]	-.09	-.10	.02	-.03	.16	.03	.04	.16	.13	-.01	.15	.01	.07	.03	.52	.47	.48	.42	.47					
23.	Has poor school adjustment	-.19	-.33	-.27	-.21	-.28	.23	.37	.26	.32	.27	.28	-.07	.06	.30	.11	.27	.47	.42	.46	.73	.63	.21				
24.	Has poor school achievement	-.17	-.17	-.19	-.12	-.10	.20	.16	.22	.25	.21	.29	-.09	.07	.29	.10	.36	.82	.54	.39	.62	.85	.47	.59			
25.	Over-all rating of WISC	-.20	-.20	-.11	-.19	-.02	.04	.20	.14	.15	.26	.20	-.09	.03	.14	.20	.17	.92	.47	.32	.57	.82	.51	.52	.83		
26.	Over-all rating of Bender	-.12	-.31	-.25	-.17	-.04	-.01	.33	.11	.14	.24	.15	.12	.10	.18	.02	.27	.27	.68	.37	.30	.44	.21	.34	.36	.27	
27.	Over-all rating of Rorschach	-.05	-.18	-.19	-.02	-.09	.07	.25	.17	-.01	.30	.14	.16	.10	.24	.04	.10	.31	.60	.91	.49	.43	.54	.46	.43	.35	.

TABLE 18

FACTOR COEFFICIENTS FOR PSYCHOLOGIST OBSERVATIONS AND QUALITATIVE JUDGMENTS ON EACH FACTOR DIMENSION

No.	FACTOR 1				FACTOR 2				FACTOR 3				FACTOR 4				FACTOR 5			
	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th
1	-.261	-.205	.209	-.168	-.259	-.327	-.327	-.051	-.237	.161	.002	-.121	-.107	.238	-.050	-.247			-.024	
2	-.313	-.094	-.089	-.192	-.310	-.105	.028	-.228	.195	.764	.688	-.623	.734	-.133	.084	-.244			-.011	
3	-.276	-.135	-.225	-.178	-.368	-.119	-.280	-.250	.099	.718	.632	-.561	.650	-.057	.076	-.404			.032	
4	-.262	-.171	-.206	-.165	-.345	-.332	.007	-.009	.114	.506	.188	-.348	.580	.118	.249	-.028	N	N	-.089	N
5	-.293	-.125	-.202	-.073	.015	-.332	-.342	-.065	-.392	.434	.409	-.015	.003	-.007	-.051	-.415	O	O	-.019	O
6	.178	.198	.158	.103	-.208	.018	.150	-.011	.437	.143	-.384	-.235	-.037	-.041	.062	.043	N	N	-.279	N
7	.249	.242	.184	.199	.861	.325	.044	.294	-.050	-.520	-.125	.762	.049	-.063	-.007	-.083	E	E	.310	E
8	.203	.209	.348	.205	.213	.138	.194	.107	.152	.199	-.346	-.046	.027	-.092	.094	.119			-.050	
9	.292	.182	.250	.229	.186	.323	.366	-.012	.251	-.255	-.094	.339	-.017	.026	-.055	.164	E	E	-.149	E
10	.241	.274	-.072	.271	.825	.297	.084	.243	.066	-.426	-.595	.630	.033	-.075	.006	-.047	X	X	.076	X
11	.399	.314	.453	.263	-.012	.143	.817	.038	.120	-.230	-.031	-.048	.103	-.182	-.031	.687	T	T	-.060	T
12	.046	-.045	-.121	-.085	-.131	-.201	-.225	.236	-.223	-.023	-.129	.043	-.140	-.169	.255	-.165	R	R	.007	R
13	.081	.210	-.128	.065	.164	.221	-.062	.117	.206	-.477	-.266	.071	-.101	-.071	.702	.103	A	A	-.101	A
14	.314	.348	.307	.227	.640	.296	.381	.228	.105	-.297	-.369	.279	-.195	-.201	-.041	.586	C	C	-.033	C
15	.991	.174	-.064	.159	.635	.199	-.079	-.057	-.121	-.335	.015	.610	.112	-.031	.702	-.113	T	T	.101	T
16	.206	.157	.437	.291	-.024	.121	.817	.078	.160	.113	.031	-.048	.071	-.123	.031	.603	E	E	.060	E
17	.936	.931	.935	.923	.013	-.084	-.049	-.096	-.026	.096	.092	-.056	.117	-.040	-.076	-.029	D	D	.087	D
18	.571	.604	.579	.535	.258	.290	-.070	.630	.282	-.007	-.187	.007	-.041	.643	.142	-.044			.688	
19	.437	.268	.491	.387	.061	.788	.039	.692	.690	.023	-.409	-.058	.016	.010	.300	.009			.000	
20	.728	.524	.596	.637	.235	.569	.169	.248	.341	-.209	-.534	.173	-.078	.066	.124	.033			-.007	
21	.864	.823	.893	.894	.147	.234	.043	.098	.095	-.112	-.132	.062	-.101	.111	.134	.047			-.081	
22	.669	.535	.676	.537	.105	.566	.123	.307	.508	.024	.099	-.087	.130	-.052	-.055	-.123			.014	
23	.697	.557	.696	.604	.292	.548	.090	.256	.436	-.122	-.593	.149	-.135	.090	.036	.130			.027	
24	.920	.917	.940	.910	-.056	-.023	.065	.065	.018	-.015	.009	-.058	-.089	-.062	-.023	.103			.074	
25	.929	.903	.951	.937	-.104	-.127	-.059	-.069	-.087	.030	.030	.052	.073	-.044	-.034	-.121			-.080	
26	.430	.513	.385	.364	.152	.403	.143	.527	.319	-.026	-.166	.085	.068	.643	.107	.105			.688	
27	.488	.304	.480	.414	.040	.818	-.061	.738	.755	.075	-.463	-.034	-.012	-.049	.218	-.070			.083	

Table 19

MEANS AND STANDARD DEVIATIONS FOR EACH VARIABLE USED IN THE FACTOR ANALYSIS OF PSYCHIATRIC OBSERVATIONS AND QUALITATIVE JUDGMENTS

No.	Variable	2nd girls		2nd boys		5th girls		5th boys	
		M.	S.D.	M.	S.D.	M.	S.D.	M.	S.D.
OBSERVATIONS:									
1.	Healthy vs imperfect health (2)*	0.09	0.29	0.08	0.27	0.11	0.31	0.16	0.36
2.	Unusual physical characteristics (2)	0.23	0.42	0.25	0.46	0.36	0.48	0.29	0.48
3.	Hyperactive vs passive (3)	1.12	0.52	0.93	0.63	1.18	0.47	1.10	0.61
4.	No anger or resentment observed (3)	1.66	0.62	1.66	0.65	1.64	0.67	1.66	0.61
5.	Inappropriate or appropriate sexual identification (3)	1.85	0.43	1.54	0.74	1.74	0.48	1.69	0.68
6.	Advanced vs retarded speech (3)	0.83	0.53	0.93	0.62	0.89	0.42	0.86	0.49
7.	Verbalizes freely (3)	1.61	0.65	1.70	0.51	0.81	0.73	1.61	0.75
8.	Grown-up vs childish (3)	0.95	0.40	1.04	0.48	0.87	0.43	0.89	0.50
9.	Obedient vs rebellious (4)	1.01	0.45	1.03	0.55	1.00	0.63	1.01	0.58
10.	Positive vs negative reaction of child to psychiatrist (5)	1.17	0.91	1.33	1.02	1.33	0.94	1.48	1.02
11.	Positive vs negative reaction of psychiatrist to child (5)	1.17	0.79	1.00	0.72	1.15	0.64	1.20	0.73
12.	Above average to below average intelligence (3)	0.72	0.48	0.75	0.61	0.96	0.60	0.71	0.56
13.	Outstanding to failing school achievement (5)	2.27	1.08	2.85	1.36	2.60	0.87	2.86	1.26
14.	Psychiatrist's confidence that judgments are accurate vs inaccurate (4)	1.19	0.76	1.21	0.69	1.18	0.74	1.29	0.77
15.	Great to poor capacity for psychological improvement (4)	1.76	0.75	1.35	0.90	1.28	0.74	1.28	0.73
16.	Total number of observed symptoms (0-16)	1.11	1.46	1.49	1.79	1.19	1.35	1.39	1.44
QUALITATIVE JUDGMENTS: each of the following is on a 5 point scale (from 1-5)									
17.	Child comfortable with self	2.96	1.29	2.90	1.25	3.16	1.14	3.26	1.27
18.	Comfortable with others	2.85	1.16	2.96	1.28	3.00	1.11	3.24	1.24
19.	Serious learning difficulties	2.57	1.00	2.85	1.21	2.84	1.02	3.03	1.20
20.	Serious behavior problems	2.40	1.06	2.64	1.17	2.49	1.04	2.84	1.09
21.	Child needs help	2.91	1.19	3.15	1.20	3.02	1.23	3.37	1.27
22.	Inappropriate reality contact	2.31	1.06	2.53	1.09	2.47	1.16	2.78	1.27
23.	Generally poor school adjustment	2.40	1.02	2.73	1.19	2.56	0.93	2.91	1.21

N = 75 2nd grade girls, 75 2nd grade boys, 55 5th grade girls, 95 5th grade boys

* ( ) range of rating scale, "0" at one extreme.

TABLE 20

CORRELATION MATRIX FOR PSYCHIATRISTS' OBSERVATIONAL DATA AND QUALITATIVE JUDGMENTS
SECOND GRADE GIRLS N = 75

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Psychiatrists Observations																							
1.	Physical health																							
2.	Unusual physical characteristics	.26																						
3.	Active vs passive (omit 8 and 9)	.19	.24																					
4.	Anger vs resentment (omit 8 and 9)	-.03	-.24	.01																				
5.	Sexual identification (omit 8 and 9)	.04	-.16	-.16	.35																			
6.	Speech maturity (omit 8 and 9)	-.07	.06	.27	.29	.17																		
7.	Skill at verbalizing	.12	-.17	-.50	.02	.05	-.39																	
8.	Grown-up vs childish behavior	-.07	-.09	.29	.24	.14	.40	-.34																
9.	Obedience vs rebelliousness	.00	.07	-.17	-.22	-.16	-.22	.18	-.00															
10.	Child's reaction to interviewer	-.11	.07	.24	-.12	-.04	.15	-.38	.21	.09														
11.	Interviewer's personal reaction to child	-.07	.37	.44	-.27	-.34	.20	-.39	.24	.07	.46													
12.	Child's intelligence	-.10	.05	.19	-.02	-.12	.39	-.26	.34	-.06	.17	.23												
13.	Estimate current scholastic achievement	-.04	.41	.25	-.36	-.20	.31	-.38	.12	-.05	.27	.46	.39											
14.	Confidence in data	.10	.20	.22	-.19	-.21	.01	-.20	.08	.11	.43	.39	.22	.29										
15.	Estimate child's capacity psychological improvement	.06	-.11	-.10	.17	.08	.12	.13	.20	-.07	-.00	-.06	.22	.04	-.08									
16.	Number observed symptoms	.13	.16	.34	-.34	-.34	-.03	-.28	-.04	.04	.04	.34	-.11	.20	-.05	-.10								
	Psychiatrists Qualitative Judgments																							
17.	Comfortable with himself?	.19	.36	.31	-.29	-.29	.23	-.40	.02	.09	.24	.44	.18	.40	.39	-.23	.40							
18.	Comfortable with others?	.20	.42	.32	-.23	-.20	.29	-.48	.21	.12	.30	.52	.26	.46	.33	-.13	.38	.86						
19.	Serious learning difficulties?	.18	.33	.41	-.18	-.14	.39	-.40	.28	.03	.39	.48	.48	.72	.40	.05	.23	.63	.72					
20.	Serious behavior problems?	.05	.37	.18	-.39	-.24	.15	-.22	.18	.25	.37	.56	.33	.55	.37	.13	.30	.57	.64	.69				
21.	Does child need help?	.22	.39	.32	-.20	-.29	.29	-.37	.07	.05	.28	.40	.24	.46	.30	-.02	.49	.85	.79	.69	.63			
22.	Appropriate contact with and relationship to reality?	.21	.32	.10	-.03	-.06	.31	-.20	.20	.27	.22	.29	.14	.36	.28	.09	.18	.75	.76	.62	.65	.76		
23.	Generally poor school adjustment?	.14	.26	.34	-.29	-.25	.28	-.29	.28	.14	.33	.51	.37	.64	.39	.08	.27	.68	.72	.79	.75	.71	.73	

TABLE 21

CORRELATION MATRIX FOR PSYCHIATRISTS' OBSERVATIONAL DATA AND QUALITATIVE JUDGMENTS
SECOND GRADE BOYS N = 75

NO.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Psychiatrists Observations																							
1.	Physical health																							
2.	Unusual physical characteristics	.38																						
3.	Active vs passive	-.12	-.07																					
4.	Anger vs resentment	.09	-.06	.15																				
5.	Sexual identification	.09	-.16	.17	.35																			
6.	Speech maturity	-.10	-.08	.04	-.01	-.22																		
7.	Skill at verbalizing	.10	-.07	-.18	.07	.24	-.14																	
8.	Grown-up vs childish behavior	.09	-.13	-.21	-.10	.03	.39	.07																
9.	Obedience vs rebelliousness	.08	-.07	-.11	-.09	.08	-.11	-.22	.19															
10.	Child's reaction to interviewer	-.04	-.07	.12	-.07	-.01	.22	-.18	-.03	.30														
11.	Interviewer's personal reaction to child	-.13	-.03	.03	-.04	.03	.47	-.04	.30	.17	.37													
12.	Child's intelligence	-.12	-.02	.12	.17	-.02	.57	-.32	.14	.05	.21	.48												
13.	Estimate current scholastic achievement	-.07	-.05	.01	-.15	-.03	.57	.19	.20	.13	.16	.59	.51											
14.	Confidence in data	-.00	.04	.12	-.06	-.07	.32	-.07	.18	-.07	.11	.38	.14	.27										
15.	Estimate child's capacity psychological improvement	-.15	-.12	.09	-.01	-.11	.37	.18	.14	.13	.07	.31	.19	.32	.02									
16.	Number observed symptoms	-.05	.19	-.16	-.17	-.39	.30	-.05	.10	.03	.17	.13	.07	.19	-.01	.09								
	Psychiatrists Qualitative Judgments																							
17.	Comfortable with himself?	.07	.26	.09	-.12	-.16	.38	-.01	.23	.06	.35	.45	.26	.45	.27	.17	.44							
18.	Comfortable with others?	.06	.14	.11	-.12	-.09	.41	.03	.23	.13	.40	.52	.31	.50	.24	.18	.41	.87						
19.	Serious learning difficulties?	-.03	.06	.07	-.10	-.15	.64	-.05	.37	.00	.24	.50	.53	.67	.30	.25	.26	.61	.62					
20.	Serious behavior problems?	.01	.10	-.11	-.14	-.09	.33	-.00	.16	.21	.35	.43	.39	.54	.23	.16	.26	.51	.54	.69				
21.	Does child need help?	.05	.31	-.02	-.18	-.23	.44	-.02	.09	-.00	.24	.39	.35	.53	.23	.23	.43	.74	.72	.71	.68			
22.	Appropriate contact with and relationship to reality?	.18	.08	-.21	-.13	.08	.26	.19	.11	.14	.29	.36	.25	.52	.25	.09	.17	.55	.60	.52	.60	.67		
23.	Generally poor school adjustment?	-.05	.11	.07	-.09	.03	.56	-.06	.23	.01	.29	.61	.56	.70	.32	.25	.29	.68	.69	.81	.75	.72	.67	

TABLE 22

CORRELATION MATRIX FOR PSYCHIATRISTS' OBSERVATION DATA AND QUALITATIVE JUDGMENTS
FIFTH GRADE GIRLS N = 55

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Psychiatrists Observations																							
1.	Physical health																							
2.	Unusual physical characteristics	.22																						
3.	Active vs passive	.12	-.02																					
4.	Anger vs resentment	-.14	-.11	.13																				
5.	Sexual identification	-.01	-.23	.31	.49																			
6.	Speech maturity	-.13	.02	.20	-.14	.09																		
7.	Skill at verbalizing	.26	.17	.12	.03	.05	-.20																	
8.	Grown-up vs childish behavior	-.02	-.10	.35	.05	.18	.60	-.11																
9.	Obedience vs rebelliousness	-.17	-.10	-.05	-.17	.18	.42	-.34	.50															
10.	Child's reaction to interviewer	.01	-.00	.09	-.33	-.05	.28	-.07	.28	.39														
11.	Interviewer's personal reaction to child	.11	.09	.10	-.01	.11	.31	-.06	.31	.35	.46													
12.	Child's intelligence	.31	.07	.09	-.01	.00	.23	.15	.50	.18	.28	.42												
13.	Estimate current scholastic achievement	.11	-.08	.20	-.16	.17	.60	-.16	.37	.32	.48	.50	.43											
14.	Confidence in data	-.15	.04	-.12	-.05	.04	.18	-.04	.18	.34	.44	.43	.21	.28										
15.	Estimate child's capacity psychological improvement	.05	.08	.01	-.10	-.08	.31	-.09	.25	.12	.33	.41	.22	.49	.10									
16.	Number observed symptoms	.18	.17	-.03	-.41	-.17	.24	-.09	.07	.17	.35	.08	.14	.27	.17	.16								
	Psychiatrists Qualitative Judgments																							
17.	Comfortable with himself?	.35	.40	.12	-.18	-.02	.17	.11	.10	.17	.44	.32	.37	.51	.24	.17	.41							
18.	Comfortable with others?	.21	.32	.17	-.13	.09	.36	.01	.23	.31	.48	.54	.35	.56	.27	.15	.44	.78						
19.	Serious learning difficulties?	.23	.22	.07	-.18	.01	.19	.06	.16	.20	.45	.42	.42	.55	.42	.19	.32	.61	.64					
20.	Serious behavior problems?	.39	.28	.03	-.21	.09	.15	.15	.17	.17	.41	.20	.47	.54	.26	.21	.40	.66	.57	.77				
21.	Does child need help?	.28	.34	.07	-.25	-.06	.18	.20	.06	.04	.42	.24	.20	.41	.19	.16	.39	.77	.73	.70	.73			
22.	Appropriate contact with and relationship to reality?	.12	.26	.01	.03	-.03	.23	-.13	.15	.20	.31	.43	.20	.40	.38	.27	.20	.60	.66	.65	.49	.65		
23.	Generally poor school adjustment?	.35	.18	.13	-.20	.08	.35	.06	.34	.30	.51	.37	.49	.57	.35	.12	.38	.77	.75	.78	.76	.70	.62	

TABLE 23

CORRELATION MATRIX FOR PSYCHIATRISTS' OBSERVATIONAL DATA AND QUALITATIVE JUDGMENTS
FIFTH GRADE BOYS N = 95

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	Psychiatrists Observations																							
1.	Physical health																							
2.	Unusual physical characteristics	.28																						
3.	Active vs passive	.05	.05																					
4.	Anger vs resentment	.01	-.00	.09																				
5.	Sexual identification	-.15	-.25	-.14	.14																			
6.	Speech maturity	.09	-.24	.04	.22	.29																		
7.	Skill at verbalizing	.06	-.08	-.23	.07	.08	-.17																	
8.	Grown-up vs childish behavior	.04	-.17	.02	.24	.28	.52	-.16																
9.	Obedience vs rebelliousness	-.10	.00	-.12	.12	.03	.00	-.02	.18															
10.	Child's reaction to interviewer	-.09	-.17	.17	.10	.04	.16	-.25	.11	.07														
11.	Interviewer's personal reaction to child	-.07	-.19	.16	.20	.14	.26	-.25	.29	.12	.56													
12.	Child's intelligence	.08	.10	.09	-.01	.12	.35	-.31	.06	.06	.07	.22												
13.	Estimate current scholastic achievement	.08	-.06	.19	.10	.00	.29	-.13	.17	.20	.09	.28	.34											
14.	Confidence in data	-.01	.09	.03	.08	.06	.23	-.25	.35	.00	.27	.35	.17	.03										
15.	Estimate child's capacity psychological improvement	-.06	-.07	.14	.07	.09	.23	.04	.05	.05	.40	.27	.07	.14	.13									
16.	Number observed symptoms	.29	.22	.13	-.07	-.36	.00	-.16	-.17	-.02	.11	.07	.10	.25	-.13	.12								
	Psychiatrists Qualitative Judgments																							
17.	Comfortable with himself?	.14	.05	.18	.02	-.07	.17	-.35	.18	.06	.30	.46	.26	.45	.36	.16	.31							
18.	Comfortable with others?	.17	.09	.24	.00	-.15	.15	-.39	.08	.09	.43	.36	.35	.35	.32	.11	.34	.81						
19.	Serious learning difficulties?	.27	.02	.09	.17	.03	.45	-.27	.34	.15	.20	.33	.46	.61	.27	.11	.14	.65	.65					
20.	Serious behavior problems?	.03	.00	-.04	-.07	.01	.17	-.18	.07	.13	.17	.18	.42	.49	.25	.03	.11	.54	.60	.68				
21.	Does child need help?	.15	-.02	.14	-.04	-.09	.23	-.27	.14	.06	.26	.33	.30	.44	.33	.15	.22	.86	.76	.66	.61			
22.	Appropriate contact with and relationship to reality?	.01	.10	.17	.06	-.07	.08	-.25	.13	.06	.25	.37	.20	.40	.33	.14	.09	.65	.59	.59	.62	.65		
23.	Generally poor school adjustment?	.23	-.14	.05	.04	.05	.41	-.22	.33	.09	.19	.34	.31	.60	.28	.07	.13	.65	.64	.85	.71	.68	.65	

TABLE 24

FACTOR COEFFICIENTS FOR PSYCHIATRIST OBSERVATIONS AND QUALITATIVE JUDGMENTS ON EACH FACTOR DIMENSION

	FACTOR 1				FACTOR 2				FACTOR 3			
Variable	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th	Girls 2nd	Boys 2nd	Girls 5th	Boys 5th
1	.202	.028	.358	.136	-.132	-.128	-.285	-.028	-.125	.639	-.278	-.211
2	.415	.133	.341	.063	-.220	.243	-.294	-.368	.209	.639	-.145	-.171
3	.336	-.015	.116	.214	.280	-.270	.228	-.011	.537	-.123	.302	.194
4	-.272	-.163	-.228	.014	.580	-.389	-.047	.333	-.227	.074	.702	.092
5	-.249	-.087	.036	-.112	.415	-.596	.235	.501	-.319	.009	.609	.042
6	.327	.573	.273	.186	.614	.224	.731	.660	.057	-.234	-.122	.033
7	-.398	.039	.113	-.369	-.348	-.258	-.402	-.088	-.452	.041	.165	-.029
8	.211	.246	.208	.158	.543	-.033	.681	.649	.170	-.059	.118	-.075
9	-.161	.111	.234	.077	-.279	-.079	.540	.106	-.258	.006	-.046	.067
10	.360	.353	.536	.368	.080	.017	.298	.118	.359	-.137	-.239	.646
11	.541	.607	.413	.450	.017	-.148	.380	.325	.429	-.189	.137	.474
12	.336	.519	.454	.327	.357	-.112	.306	.251	.120	-.161	.065	-.082
13	.606	.721	.618	.482	-.047	-.086	.465	.194	.275	-.177	.050	-.051
14	.415	.357	.342	.397	-.120	-.072	.219	.306	.225	-.010	.007	.108
15	-.003	.265	.195	.166	.284	.072	.373	.178	-.286	-.251	-.151	.443
16	.380	.362	.460	.282	-.292	.596	.056	-.330	.416	.009	-.434	.143
17	.855	.786	.847	.913	-.155	.205	-.080	.037	.056	.142	-.029	.001
18	.887	.764	.820	.849	.019	.134	.147	-.063	.090	.049	.018	.066
19	.815	.837	.828	.753	.161	.036	-.001	.356	.133	-.091	.030	-.209
20	.778	.790	.825	.700	-.158	.004	-.031	.046	.026	-.010	.012	-.216
21	.874	.837	.858	.890	-.037	.234	-.189	.043	-.014	.156	-.067	-.097
22	.843	.746	.724	.743	.145	-.207	.005	-.018	-.421	.125	.159	.031
23	.864	.901	.889	.771	.026	-.117	.153	.339	.015	-.052	.037	-.232

Table 25

MEANS AND STANDARD DEVIATIONS FOR SELECTED SCHOOL DATA, TEACHER RATINGS, PEER RATINGS AND SELF RATINGS
2ND GRADE GIRLS

No.	Variable	M.	S.D.
	DATA FROM SCHOOL RECORDS:		
1.	Original teacher rating	2.13	1.99
2.	Grade age-chronological age	-1.54	3.20
3.	Group ability test	110.35	16.86
4.	Reading test grade-placement minus actual grade placement	1.82	6.30
5.	Arithmetic test grade-placement minus actual grade placement	1.56	4.51
6.	Grade in reading	2.75	1.30
7.	Grade in arithmetic	2.66	1.26
8.	Grade in language	2.64	1.20
9.	Grade in social studies	2.54	1.19
10.	Number of unsatisfactory marks	0.20	0.71
11.	Number of days absent	5.81	5.51
12.	Occupation of father	2.96	2.87
	BEHAVIOR RATING OF PUPILS-(Teacher rating):		
13.	Gets into fights or quarrels	3.43	1.42
14.	Has to be coaxed or forced to work or play	3.72	1.62
15.	Has difficulty learning	3.47	1.39
16.	Makes unusual or inappropriate responses	3.41	1.44
17.	Works extremely hard in learning	4.42	1.37
18.	Behaves in ways which are dangerous	3.30	1.41
19.	Unhappy or depressed	3.67	1.53
20.	Becomes upset or sick often	3.86	1.57
	CLASS PICTURES (Peer rating):		
21.	Talking to friend while teacher is explaining something to class	0.86	0.89
22.	Having fun on the swings	1.12	0.82
23.	Chasing a boy trying to hit him	0.88	0.86
24.	Sick in nurse's office	1.07	0.82
25.	A happy child (girl)	1.31	0.78
26.	A girl who is being brought to school by her mother	0.88	0.85
27.	A girl walking along with her friends	1.35	0.79
28.	A girl fighting with another child	0.97	0.86
29.	A girl working quietly at the table	1.20	0.82
30.	A girl playing tether-ball	1.11	0.86
	SELF RATING:		
31.	Total score - Picture game, 2nd grade self rating	30.33	7.26

N = 318

Table 26

MEANS AND STANDARD DEVIATIONS FOR SELECTED SCHOOL DATA,
TEACHER RATINGS, PEER RATINGS AND SELF RATINGS
2ND GRADE BOYS

No.	Variable	M.	S.D.
	DATA FROM SCHOOL RECORDS:		
1.	Original teacher rating	2.78	2.43
2.	Grade age-chronological age	-1.00	3.64
3.	Group ability test	106.38	16.29
4.	Reading test grade-placement minus actual grade placement	0.44	4.63
5.	Arithmetic test grade-placement minus actual grade placement	1.41	4.46
6.	Grade in reading	2.38	1.32
7.	Grade in arithmetic	2.50	1.27
8.	Grade in language	2.43	1.24
9.	Grade in social studies	2.45	1.17
10.	Number of unsatisfactory marks	0.65	1.18
11.	Number of days absent	4.96	4.89
12.	Occupation of father	2.85	2.78
	BEHAVIOR RATING OF PUPILS-(Teacher rating):		
13.	Gets into fights or quarrels	4.48	1.58
14.	Has to be coaxed or forced to work or play	4.07	1.57
15.	Has difficulty learning	4.22	1.65
16.	Makes unusual or inappropriate responses	4.31	1.58
17.	Works extremely hard in learning	3.78	1.64
18.	Behaves in ways which are dangerous	4.42	1.56
19.	Unhappy or depressed	4.25	1.59
20.	Becomes upset or sick often	3.99	1.59
	CLASS RATING (Peer Rating):		
21.	Sitting at his desk listening	1.05	0.86
22.	Playing ball with other children	1.24	0.81
23.	Fighting with other boy	0.94	0.88
24.	Playing kick-ball	1.23	0.84
25.	Unhappy boy	1.03	0.84
26.	Carrying milk back to class	1.02	0.84
27.	Playing on the bars	1.13	0.80
28.	A boy having a stomach ache	1.07	0.83
29.	Playing with toys while class is working	0.96	0.87
30.	Being told by teacher not to do something	1.02	0.86
	SELF RATING:		
31.	Total score-Picture Game- 2nd grade self rating	28.04	6.81

N = 364

Table 27

MEANS AND STANDARD DEVIATIONS FOR SELECTED SCHOOL DATA, TEACHER RATINGS, PEER RATINGS AND SELF RATINGS
5TH GRADE GIRLS

No.	Variable	M.	S.D.
	DATA FROM SCHOOL RECORDS:		
1.	Original teacher rating	2.44	2.14
2.	Grade age-chronological age	-1.24	4.01
3.	Group ability test	107.35	13.71
4.	Reading test grade-placement minus actual grade placement	6.33	23.48
5.	Arithmetic test grade-placement minus actual grade placement	3.00	7.95
6.	Grade in reading	2.89	1.18
7.	Grade in arithmetic	2.64	1.20
8.	Grade in language	2.79	1.12
9.	Grade in social studies	2.68	1.14
10.	Number of unsatisfactory marks	0.17	0.52
11.	Number of days absent	5.10	4.88
12.	Occupation of father	3.05	2.75
	SELF RATING:		
13.	Total score - Thinking About Yourself	27.87	10.61
	CREATIVE THINKING TESTS-(Verbal Divergent Production)		
14.	Fluency	41.89	19.27
15.	Adequacy	15.93	8.56
16.	Flexibility	26.70	11.61
17.	Originality	63.92	31.25
18.	Elaboration	24.40	12.67
	CREATIVE THINKING TESTS-(Non-verbal Divergent Production)		
19.	Fluency	21.03	7.49
20.	Activity	3.92	4.12
21.	Flexibility	11.70	3.96
22.	Originality	47.27	14.98
23.	Elaboration	35.67	11.28
24.	Title adequacy	9.60	3.86
No.	Variable	M.	S.
	BEHAVIOR RATING OF PUPILS-(Teacher rating):		
25.	Gets into fights or quarrels	3.64	1.
26.	Has to be coaxed or forced to work or play	3.97	1.
27.	Has difficulty learning	3.77	1.
28.	Makes unusual or inappropriate responses	3.58	1.
29.	Works extremely hard in learning	4.23	1.
30.	Behaves in ways which are dangerous	3.60	1.
31.	Unhappy or depressed	3.95	1.
32.	Becomes upset or sick often	4.00	1.
	CLASS PLAY (Peer Rating):		
33.	A true friend	1.04	0.
34.	Afraid -acts like small child	0.56	0.
35.	A class president	0.53	0.
36.	Stuck up - thinks she's better	0.50	0.
37.	A mean, cruel boss	1.17	0.
38.	Team captain-well liked	1.13	0.
39.	Someone who is smart	0.45	0.
40.	Often gets angry-argues	0.48	0.
41.	Jolly-doesn't cause trouble	0.74	0.
42.	A bully	0.77	0.
43.	A helper-well liked by everybody	0.37	0.
44.	A very lazy person	0.70	0.
45.	Plays games fairly	0.50	0.
46.	A nice pest	0.73	0.
47.	Someone to direct the play	0.65	0.
48.	Always getting hurt	1.04	0.
49.	A school nurse or doctor	0.32	0.
50.	Always late for school	6.44	6.

N = 333

Table 28

MEANS AND STANDARD DEVIATIONS FOR SELECTED SCHOOL DATA, TEACHER RATINGS, PEER RATINGS, AND SELF RATINGS
5TH GRADE BOYS

No.	Variable	M.	S.D.
	DATA FROM SCHOOL RECORDS:		
1.	Original teacher rating	2.71	2.37
2.	Grade age-chronological age	-0.60	4.37
3.	Group ability test	106.37	13.88
4.	Reading test grade-placement minus actual grade placement	3.40	11.93
5.	Arithmetic test grade-placement minus actual grade placement	3.22	7.81
6.	Grade in reading	2.66	1.23
7.	Grade in arithmetic	2.62	1.23
8.	Grade in language	2.56	1.14
9.	Grade in social studies	2.68	1.17
10.	Number of unsatisfactory marks	0.57	1.13
11.	Number of days absent	4.48	4.88
12.	Occupation of father	2.51	2.69
	SELF RATING:		
13.	Total score - Thinking About Yourself	28.25	11.46
	CREATIVE THINKING TESTS (Verbal Divergent Production):		
14.	Fluency	38.46	23.30
15.	Adequacy	15.01	21.08
16.	Flexibility	24.71	22.44
17.	Originality	60.09	52.38
18.	Elaboration	22.83	31.87
	CREATIVE THINKING TESTS (Non-verbal Divergent Production):		
19.	Fluency	21.10	8.13
20.	Activity	4.36	4.09
21.	Flexibility	11.15	3.95
22.	Originality	47.74	16.74
23.	Elaboration	34.20	10.34
24.	Title adequacy	8.58	3.96
	BEHAVIOR RATING OF PUPILS-(Teacher Rating):		
25.	Gets into fights or quarrels	4.23	1.58
26.	Has to be coaxed or forced to work or play	3.86	1.59
27.	Has difficulty learning	3.99	1.68
28.	Makes unusual or inappropriate responses	4.40	1.60
29.	Works extremely hard in learning	3.62	1.58
30.	Behaves in ways which are dangerous	4.39	1.54
31.	Unhappy or depressed	4.03	1.51
32.	Becomes upset or sick often	4.05	1.54
	CLASS PLAY (Peer Rating):		
33.	A true friend	0.96	0.78
34.	Afraid-acts like small child	0.60	0.79
35.	A class president	0.63	0.82
36.	Stuck up-thinks he's better	0.75	0.87
37.	A mean, cruel boss	0.96	0.85
38.	Team captain-well liked	0.84	0.88
39.	Someone who is smart	0.55	0.79
40.	Often gets angry-argues	0.76	0.83
41.	Jolly-doesn't cause trouble	0.71	0.83
42.	A bully	0.87	0.87
43.	A helper-well liked	0.65	0.80
44.	A very lazy person	0.86	0.87
45.	Plays games fairly	0.89	0.83
46.	A nice pest	0.89	0.86
47.	Someone to direct the play	0.82	0.82
48.	Always getting hurt	0.60	0.78
49.	A school nurse or doctor	0.57	0.75
50.	Always late for school	0.51	0.76
	SELF RATING:		
51.	Number of negative self selections on class play	8.93	6.75

N = 386

TABLE 29

CORRELATION MATRIX FOR SELECTED SCHOOL DATA, TEACHER RATING, PEER RATING & SELF RATING
2nd GRADE GIRLS N = 318

No.	Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
	Data from School Records																															
1.	Original teacher rating																															
2.	Grade age - chronological age	.04																														
3.	Group ability test	-.07	-.36																													
4.	Reading test grade - actual grade	-.13	-.16	.30																												
5.	Arithmetic test grade - actual grade	-.02	-.10	.35	.63																											
6.	Grade in reading	-.10	-.10	.13	.12	.04																										
7.	Grade in arithmetic	-.17	-.07	.06	.04	-.03	.89																									
8.	Grade in language	-.12	-.06	-.03	.03	-.05	.87	.88																								
9.	Grade in social studies	-.14	-.04	-.05	-.00	-.05	.83	.87	.90																							
10.	Number of unsatisfactory marks	.05	.03	-.22	-.06	-.07	-.17	-.16	-.11	-.11																						
11.	Number of days absent	.14	.00	-.13	.00	.00	-.14	-.11	-.07	-.07	.09																					
12.	Occupation of father	-.00	.10	-.28	-.18	-.26	-.05	.01	.01	.05	.07	.00																				
	Behavior Rating of Pupils - Teacher Rating																															
13.	Gets into fights or quarrels	.09	-.07	-.14	-.03	.00	-.10	-.10	-.06	-.02	.15	.11	-.02																			
14.	Has to be coaxed or forced to work or play	.14	-.03	-.09	-.04	-.02	-.01	-.00	.01	.02	.20	.03	.06	.11																		
15.	Has difficulty learning	.24	.15	-.40	-.33	-.19	-.19	-.09	-.01	.04	.25	.11	.18	.23	.31																	
16.	Makes unusual or inappropriate responses	.23	-.01	-.22	-.20	-.09	-.09	-.05	-.02	.02	.28	.05	.04	.52	.35	.52																
17.	Works extremely hard in learning	-.16	-.09	.17	.14	.07	.11	.11	.03	.03	-.18	-.14	.01	-.31	-.19	-.37	-.33															
18.	Behaves in ways which are dangerous	.11	.12	-.18	-.12	-.06	-.07	-.01	-.01	.04	.20	.03	.10	.51	.33	.39	.54	-.22														
19.	Unhappy or depressed	.19	.14	-.24	-.18	-.07	-.03	-.00	.04	.06	.23	.09	.08	.31	.57	.52	.49	-.29	.40													
20.	Becomes upset or sick often	.22	.06	-.08	-.14	-.01	-.12	-.04	-.06	-.05	.16	.13	.05	.33	.47	.45	.50	-.19	.46	.60												
	Class Pictures (Peer Rating)																															
21.	Talking to friend while teacher is explaining something to class	.11	.13	-.12	-.07	.02	-.14	-.13	-.10	-.06	.17	.01	.02	.34	-.03	.20	.31	-.22	.29	.14	.12											
22.	Having fun on the swings	.01	.04	.01	.05	-.06	-.05	-.08	-.09	-.08	-.01	.01	-.01	.01	-.08	-.08	-.10	-.00	-.07	-.04	-.02	.11										
23.	Chasing a boy trying to hit him	.17	.02	-.11	-.08	-.07	-.09	-.11	-.08	-.07	.18	-.06	.04	.35	.07	.19	.28	-.17	.30	.17	.18	.42	.06									
24.	Sick in the nurse's office	.07	-.00	.06	.05	.06	-.02	-.04	-.03	-.05	.07	.02	-.03	.03	.08	-.04	.09	-.07	-.08	-.02	.03	.03	.02	.13								
25.	A happy child (girl).	-.08	.02	.01	.05	-.00	.05	.04	.04	.02	-.08	-.11	-.06	.01	-.16	-.11	-.16	.08	-.09	-.16	-.12	.05	.19	.06	-.02							
26.	A girl who is being brought to school by her mother	.20	-.02	-.07	-.09	-.05	.01	-.03	-.01	.03	.14	-.01	-.04	.16	.18	.15	.25	-.14	.12	.20	.23	.19	-.01	.28	.22	-.04						
27.	A girl walking along with her friends	-.09	.05	.07	.02	.01	.07	.04	.04	.01	-.07	-.01	-.12	-.11	-.18	-.11	-.15	.09	-.15	-.14	-.07	.04	.06	.05	.02	.21	-.05					
28.	A girl fighting with another child	.11	.14	-.15	-.08	-.03	-.17	-.14	-.10	-.10	.16	.02	.03	.30	.08	.20	.31	-.23	.28	.19	.18	.40	.17	.37	.13	.03	.12	.01				
29.	A girl working quietly at the table	-.04	.08	.12	.11	-.01	.14	.08	.06	.06	-.18	-.05	.02	-.19	-.21	-.24	-.31	.30	-.27	-.25	-.21	-.19	.23	-.05	.02	.24	-.08	.22	-.07			
30.	A girl playing tether-ball	-.10	.07	.20	-.09	-.12	-.10	-.08	-.08	-.05	-.12	-.01	.03	.03	-.17	-.05	-.13	.06	-.07	-.10	-.02	.05	.20	.09	-.02	.19	-.05	.12	.07	.12		
	Self Rating																															
31.	Total score - Picture Game - second grade self rating	.03	.04	.11	.03	.07	.02	-.04	-.03	.01	-.12	-.13	-.09	-.06	-.11	-.04	-.02	.02	-.04	-.01	-.03	.01	-.09	-.05	-.13	-.03	-.04	.01	-.02	.06	-.34	

TABLE 30

CORRELATION MATRIX FOR SELECTED SCHOOL DATA, TEACHER RATING, PEER RATING & SELF RATING
2nd GRADE BOYS N = 364

No. Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Data From School Records																															
1. Original teacher rating																															
2. Grade age - chronological age	.01																														
3. Group ability test	-.17	-.23																													
4. Reading test grade - actual grade	-.10	-.12	.29																												
5. Arithmetic test grade - actual grade	-.08	-.16	.30	.55																											
6. Grade in reading	-.24	-.02	.19	.16	.04																										
7. Grade in arithmetic	-.23	-.04	.16	.11	.00	.87																									
8. Grade in language	-.21	-.01	.13	.09	-.01	.88	.86																								
9. Grade in social studies	-.18	.00	.05	.03	-.05	.85	.85	.90																							
10. Number of unsatisfactory marks	.24	.09	-.22	-.15	-.10	-.24	-.25	-.25	-.16																						
11. Number of days absent	.21	-.05	-.10	-.08	-.02	-.03	-.06	-.01	-.03	.07																					
12. Occupation of father	.07	.11	-.27	-.16	-.22	.00	-.04	.00	.03	.13	.00																				
Behavior Rating of Pupils - Teacher Rating																															
13. Gets into fights or quarrels	.10	.12	-.06	-.05	-.04	-.20	-.22	-.22	-.19	.28	.06	-.00																			
14. Has to be coaxed or forced to work or play	.09	.08	-.19	-.14	-.05	-.11	-.11	-.07	-.05	.19	.01	.05	.07																		
15. Has difficulty learning	.23	.10	-.39	-.33	-.18	-.40	-.33	-.28	-.20	.31	.10	.12	.33	.32																	
16. Makes unusual or inappropriate responses	.17	.06	-.21	-.12	-.06	-.29	-.25	-.22	-.20	.32	.08	.01	.52	.38	.59																
17. Works extremely hard in learning	-.20	-.11	.26	.15	.09	.22	.17	.18	.14	-.29	-.03	-.09	-.32	-.27	-.51	-.43															
18. Behaves in ways which are dangerous	.16	.09	-.13	-.10	-.03	-.23	-.22	-.21	-.17	.27	.06	.02	.70	.28	.42	.61	-.35														
19. Unhappy or depressed	.23	.02	-.20	-.14	-.02	-.21	-.16	-.15	-.12	.29	.07	.02	.39	.40	.47	.49	-.26	.42													
20. Becomes upset or sick often	.19	-.00	-.19	-.09	-.04	-.16	-.15	-.12	-.13	.07	.06	-.00	.23	.36	.36	.41	-.12	.39	.52												
Class Pictures (Peer Rating)																															
21. Sitting at his desk listening	-.08	-.04	.09	.16	.10	.13	.10	.07	.05	-.26	-.16	-.04	-.26	-.17	-.33	-.30	.28	-.26	-.27	-.14											
22. Playing ball with other children	-.06	.10	.12	.07	.03	.15	.14	.07	.10	-.08	-.08	.03	-.04	-.20	-.26	-.17	.11	-.09	-.20	-.13	.24										
23. Fighting with other boy	.15	.16	-.10	-.07	-.06	-.14	-.13	-.14	-.07	.24	.06	.05	.48	.10	.21	.33	-.24	.39	.20	.15	-.21	.11									
24. Playing kick-ball	-.04	.01	.10	.08	.07	.07	.04	-.01	-.01	-.08	-.07	.01	.00	-.22	-.26	-.14	.10	-.06	-.17	-.20	.21	.34	.09								
25. Unhappy boy	.13	.11	-.10	-.19	-.16	-.11	-.12	-.12	-.09	.16	.11	.03	.14	.21	.26	.24	-.17	.19	.22	.17	-.19	-.12	.14	-.13							
26. Carrying milk back to class	-.08	.08	.16	.06	-.02	-.10	.06	.04	.01	-.10	-.02	-.10	-.10	-.20	-.14	-.19	.15	-.18	-.21	-.14	.24	.19	-.04	.15	.01						
27. Playing on the bars	-.05	.02	.03	-.02	-.06	-.05	-.06	-.04	-.05	.07	-.09	.15	.03	.02		-.00	-.07	.04	-.04	.02	.00	.13	.13	.11	.09	.02					
28. A boy having a stomach ache	.12	.05	-.02	-.06	.00	.03		.00	.05	.15	-.01	-.00	.15	.13	.12	.19	-.08	.16	.16	.16	-.13	-.03	.25	.04	.33	-.06	.03				
29. Playing with toys while class is working	.11	.03	-.09	-.08	-.01	-.08	-.11	-.16	-.09	.16	-.01	.08	.29	.17	.17	.30	-.24	.27	.19	.14	-.13	.01	.26	-.07	.22	-.05	.08	.14			
30. Being told by teacher not to do something	.11	.09	-.12	-.11	-.05	-.16	-.13	-.14	-.10	.29	.09	.03	.37	.07	.21	.31	-.24	.32	.17	.01	-.13	.08	.38	.08	.21	-.04	.10	.22	.27		
Self Rating																															
31. Total score - Picture Game - second grade self rating	-.08	.11	.14	.12	.03	.10	.09	.09	.05	-.08	-.08	-.06	-.07	-.01	-.16	-.12	.06	-.09	-.09	-.13	.12	.02	-.01	.06	-.02	.27	-.02	-.04	-.03	-.03	

TABLE 31

CORRELATION MATRIX OF SELECTED SCHOOL DATA, TEACHER RATINGS, PEER RATINGS, & SELF RATINGS
5th GRADE GIRLS N = 333

No. Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Data from School Records																																																		
1. Original teacher rating																																																		
2. Grade age - chronological age	.08																																																	
3. Group ability test	-.03	-.12																																																
4. Reading test grade - placement - actual grade placement	-.04	-.17	.35																																															
5. Arithmetic test grade - placement - actual grade placement	-.04	-.12	.29	.41																																														
6. Grade in reading	-.06	-.03	.27	.18	.25																																													
7. Grade in arithmetic	-.14	-.06	.20	.06	.42	.71																																												
8. Grade in language	-.06	-.04	.30	.30	.21	.85	.81																																											
9. Grade in social studies	-.06	-.01	.21	.15	.23	.83	.83	.83																																										
10. Number of unsatisfactory marks	.25	.05	-.04	-.09	-.13	-.21	-.23	-.19	-.20																																									
11. Number of days absent	.07	.08	.06	-.08	-.04	-.09	-.11	-.16	-.09	.02																																								
12. Occupation of father	-.10	.08	-.31	-.17	-.22	-.20	-.11	-.16	-.20	.12	.05																																							
Self Rating																																																		
13. Total score - TSF	.06	-.04	-.02	-.12	-.13	-.13	-.12	-.11	-.14	.16	.02	.08																																						
Creative Thinking Tests - Verbal Divergent Production																																																		
14. Fluency	.09	-.04	.29	.19	.24	.22	.12	.14	.15	-.10	-.07	-.18	-.11																																					
15. Adequacy	.07	-.09	.27	.22	.21	.21	.11	.19	.15	-.04	-.09	-.14	-.13	.73																																				
16. Flexibility	.06	-.04	.30	.16	.28	.23	.13	.16	.16	-.08	-.04	-.21	-.11	.89	.71																																			
17. Originality	.08	-.01	.27	.21	.25	.19	.10	.13	.13	-.10	-.10	-.19	-.07	.73	.71	.86																																		
18. Elaboration	.08	-.02	.32	.22	.28	.25	.13	.18	.17	-.07	-.08	-.20	-.08	.56	.60	.71	.82																																	
Creative Thinking Tests Non-Verbal Divergent Production																																																		
19. Fluency	.19	-.04	-.03	-.05	-.05	-.09	-.10	-.11	-.07	.07	-.05	-.03	-.05	.30	.26	.29	.33	.26																																
20. Activity	.03	-.03	-.07	-.04	-.02	-.12	-.16	-.11	-.10	.05	.04	.07	.01	-.00	.08	.02	-.01	-.02	.11																															
21. Flexibility	.07	.04	-.01	-.01	-.02	-.08	-.08	-.09	-.09	-.09	-.08	.03	.00	.31	.23	.22	.29	.23	.55	.01																														
22. Originality	.16	-.03	.01	-.01	-.04	-.07	-.12	-.08	-.08	-.05	-.01	-.04	-.03	.36	.34	.30	.32	.28	.76	.12	.56																													
23. Elaboration	.07	-.06	.13	.01	.02	-.01	-.07	-.07	-.02	-.11	.07	-.09	.01	.39	.30	.32	.35	.31	.59	.13	.41	.68																												
24. Title Adequacy	-.01	-.09	.22	.08	.05	.13	.07	.10	.10	-.09	-.01	-.11	-.08	.27	.26	.31	.26	.23	.22	.04	.19	.28	.25																											
Behavior Rating of Pupils - Teacher Rating																																																		
25. Gets into fights or quarrels	.12	.10	-.06	-.14	-.14	-.11	-.13	-.12	-.15	.24	-.05	.10	.18	.05	.05	.01	.08	.02	.19	.04	.09	.14	.07	.01																										
26. Has to be coaxed or forced to work or play	.11	.11	-.13	-.12	-.22	-.15	-.10	-.15	-.19	.15	.17	.11	.07	-.09	-.13	-.11	-.13	-.12	.06	.01	-.01	.12	.06	.00	.07																									
27. Has difficulty learning	.23	.16	-.42	-.20	-.36	-.34	-.34	-.29	[illegible]	[illegible]	.03	.09	.17	-.15	-.22	-.21	-.15	-.20	.22	.08	.09	.17	.02	-.11	.26	.35																								
28. Makes unusual or inappropriate responses	.23	.04	-.18	-.17	-.19	-.21	-.22	-.20	-.19	.30	-.01	.03	.16	.04	.00	.02	.07	.01	.19	.13	.06	.15	.03	-.03	.49	.23	.53																							
29. Works extremely hard in learning	-.21	-.06	.14	.12	.22	.23	.26	.23	.22	-.30	-.00	-.06	-.11	.00	.01	.08	-.01	.02	-.19	-.01	-.08	-.13	-.02	.05	-.41	-.21	-.54	-.57																						
30. Behaves in ways which are dangerous	.22	.09	-.18	-.14	-.14	-.17	-.19	-.19	-.20	.20	.01	.00	.07	.07	.03	.01	.07	.03	.04	.07	.08	.17	.07	-.05	.55	.12	.42	.57	-.50																					
31. Unhappy or depressed	.21	.08	-.17	-.20	-.26	[illegible]	-.17	-.20	-.19	.28	.07	.12	.11	-.03	-.09	-.07	-.06	-.11	.13	.01	.08	.12	.03	.00	.36	.53	.57	.56	-.51	.49																				
32. Becomes upset or sick often	.18	.09	-.10	-.08	-.27	[illegible]	-.24	-.19	-.22	.23	.18	.07	.11	-.02	-.06	-.08	-.03	-.08	.11	.04	.00	.13	.01	.09	.35	.42	.51	.49	-.43	.41	.44																			
Class Play (Peer Rating)																																																		
33. A true friend	-.16	-.10	.15	.04	.13	.14	.21	.13	.16	-.17	-.05	-.16	-.08	.06	.06	.06	.03	.09	-.08	-.09	-.05	-.12	-.02	.03	-.22	-.25	-.27	-.28	.34	-.17	-.23	-.19																		
34. Afraid-acts like small child	-.03	-.02	-.04	-.04	-.02	-.09	-.05	-.05	-.01	.09	.11	-.01	.06	-.04	-.04	-.05	-.07	-.05	.09	.04	-.03	-.08	-.02	-.01	.15	.14	.15	.23	-.12	.16	.17	.10	-.11																	
35. A class president	-.19	-.07	.11	.07	.23	.13	.17	.10	.14	-.09	-.10	-.02	-.08	.08	.10	.11	.07	.11	-.04	-.07	-.02	-.08	.03	.07	-.17	-.21	-.33	-.27	.19	-.21	-.34	-.30	.25	-.07																
36. Stuck up-thinks she's better	.05	.06	-.02	-.01	.08	-.03	-.03	-.03	-.06	.13	-.03	.03	-.08	.05	.11	.08	.09	.04	.10	.12	.03	.08	.07	.12	.34	-.11	-.08	.11	-.04	.06	-.03	.04	-.02	.04	.04															
37. A mean, cruel boss	-.17	-.13	.16	-.01	.10	.02	.04	.01	.05	.11	-.04	-.06	-.08	.03	.04	.11	.06	.03	-.12	.01	-.08	-.12	-.09	-.00	-.10	-.23	-.27	-.26	.19	-.14	-.22	-.28	.16	-.04	.23	.02														
38. Team captain-well liked	-.01	.06	.07	-.00	.04	.01	.00	-.03	-.02	-.06	-.09	.01	.01	.05	.10	.09	.08	.01	.06	.03	.03	.02	.04	.07	.19	-.10	-.08	.15	-.06	.29	.03	.03	-.12	.04	.04	.31	.13													
39. Someone who is smart	-.22	-.07	.26	.11	.22	.25	.23	.17	.19	-.12	-.11	-.05	-.09	.10	.13	.15	.10	.16	-.11	-.03	-.02	-.08	-.01	.11	-.21	-.28	-.49	-.37	.31	-.32	-.37	-.35	.15	-.10	.35	.05	.29	.05												
40. Often gets angry-nervous	.09	.02	-.01	-.03	-.06	-.03	-.02	-.03	-.01	.17	-.03	.03	.02	.04	.03	.05	.05	.02	.13	.05	.08	.09	.08	.05	.38	.02	.12	.16	-.16	.29	.13	.15	-.14	.12	-.11	.39	.06	.36	-.06											
41. Jolly-doesn't cause trouble	-.14	-.02	.05	.12	.13	.09	.12	.12	.09	-.14	-.03	-.06	-.05	-.09	-.06	-.03	-.09	-.01	-.16	-.15	-.12	-.13	-.01	-.02	-.33	-.20	-.30	-.36	.33	-.32	-.34	-.34	.23	-.06	.27	-.11	.23	-.10	.22	-.18										
42. A bully	-.14	-.06	.11	.14	.13	.08	.10	.14	.00	-.15	-.09	-.06	-.09	.01	.05	.05	.03	.00	-.16	-.09	-.09	-.12	-.04	-.02	-.20	-.27	-.36	-.29	.34	-.30	-.41	-.33	.30	-.03	.41	-.05	.33	-.08	.35	-.14	.42									
43. A helper-well liked by everybody	.11	.17	-.06	-.09	-.20	-.07	-.13	-.07	-.05	.15	.05	.02	.15	-.00	.00	-.04	-.00	-.08	.01	-.03	.01	.01	-.06	.00	.20	.20	.22	.31	-.24	.25	.04	.37	-.28	.22	-.17	.04	-.16	.06	-.13	.08	-.10	-.18								
44. A very lazy person	-.14	-.04	.09	-.04	.08	-.01	.02	-.03	-.02	-.13	.02	-.02	-.02	-.06	-.01	-.02	-.05	.01	-.20	.03	-.07	-.14	-.06	-.02	-.31	-.00	-.27	-.35	.26	-.29	-.29	-.23	.20	-.03	.22	-.20	.19	-.27	.30	-.19	.33	.32	-.15							
45. Plays games fairly	.05	-.05	-.01	-.05	-.09	-.08	-.07	-.07	-.09	.15	-.08	.05	.14	.01	.03	.01	.02	.00	.11	.03	-.04	.01	-.01	.05	.29	-.00	.20	.33	-.29	.30	.18	.20	-.13	.12	-.05	.08	-.07	.18	-.15	.19	-.12	-.19	.16	-.17						
46. A nice mess	-.18	.00	.11	.15	.18	.07	.11	.06	.09	-.16	-.03	-.02	-.06	.14	.12	.14	.16	.13	-.06	-.02	-.01	-.05	.12	.10	-.21	-.22	-.32	-.33	.22	-.22	-.31	-.30	.34	-.12	.44	-.03	.27	-.09	.31	-.30	.37	.31	-.17	.26	-.11					
47. Someone to direct the play	.04	-.11	-.06	-.04	-.01	-.05	-.05	-.03	-.03	.13	.02	-.02	.10	.05	.03	.03	.02	.02	.05	.08	-.01	-.01	-.06	.03	.17	.07	.13	.18	-.15	.13	.15	.19	-.10	.12	-.11	.00	-.07	.04	-.12	.05	-.14	-.05	.07	-.09	.13	-.18				
48. Always getting hurt	-.14	.02	.06	.01	.07	.10	.12	.11	.12	-.16	-.11	-.07	.01	.03	.04	.07	.03	.06	-.06	.08	.01	-.07	.02	.10	-.17	-.19	-.19	-.25	.25	-.30	-.29	-.25	-.30	-.07	.04	-.06	.29	.12	.18	.02	.20	.31	-.17	.20	-.10	.19	-.03			
49. A school nurse or doctor	.09	-.01	-.01	-.03	-.12	-.06	-.05	-.04	-.06	.12	.04	-.02	.00	.01	.01	-.04	.00	-.04	.05	-.09	.05	.04	.06	.01	.15	.07	.12	.14	-.12	.09	.11	.09	-.21	.04	-.10	-.00	-.11	-.04	-.05	.07	-.08	-.12	.23	-.12	.07	-.04	.10	-.13		
50. Always late for school	.15	.04	-.16	-.11	-.15	-.13	-.11	-.12	-.09	.25	.01	.07	.14	-.00	-.01	.01	-.02	-.06	.15	.06	.05	.15	.04	.04	.13	.22	.21	.09	-.25	.25	.29	.22	-.17	.10	-.14	.05	-.10	.07	-.21	.14	-.10	-.22	.11	-.17	.16	-.19	.29	-.19	.17	

TABLE 37

CORRELATION MATRIX OF SELECTED SCHOOL DATA, TEACHER RATING, PEER RATING, & SELF RATING
5th GRADE [illegible] N = [illegible]

No.	Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51
	Data from School Records																																																		
1.	Original teacher rating																																																		
2.	Grade age - chronological age	-.02																																																	
3.	Group ability test	.07	-.40																																																
4.	Reading test grade placement - actual grade placement	.03	-.25	.53																																															
5.	Arithmetic test grade placement - actual grade placement	.01	-.22	.40	.68																																														
6.	Grade in reading	-.07	-.14	.36	.36	.86																																													
7.	Grade in arithmetic	-.16	-.06	.25	.21	.21	.80																																												
8.	Grade in language	-.07	-.11	.29	.30	.24	.86	.81																																											
9.	Grade in social studies	-.05	-.10	.27	.31	.86	.84	.80	.85																																										
10.	Number of unsatisfactory marks	.04	.07	-.16	-.12	-.13	-.25	-.23	-.20	[illegible]																																									
11.	Number of days absent	.03	-.04	.01	-.05	-.09	-.13	-.08	-.11	[illegible]	-.03																																								
12.	Occupation of father	-.10	.11	-.19	-.27	-.22	-.09	-.05	-.07	-.08	.10	-.02																																							
	Self Rating																																																		
13.	Total score - TAY	.11	.10	-.11	-.09	-.12	-.06	-.11	-.08	-.10	.15	.02	.08																																						
	Creative Thinking Tests: Verbal Divergent Production																																																		
14.	Fluency	.11	-.15	.21	.18	.13	.18	.07	.15	.13	-.12	.07	-.09	-.06																																					
15.	Adequacy	.07	-.04	.08	.06	.04	.05	.01	.04	.08	-.07	.00	-.01	-.08	.75																																				
16.	Flexibility	.09	-.09	.14	.10	.08	.12	.04	.07	.14	-.10	-.02	-.04	-.07	.83	.94																																			
17.	Originality	.10	-.10	.15	.12	.11	.14	.05	.10	.14	-.11	.02	-.05	-.06	.91	.91	.95																																		
18.	Elaboration	.08	-.06	.09	.08	.08	.08	.02	.06	.10	-.08	.02	-.02	-.06	.81	.95	.94	.95																																	
	Creative Thinking Tests Non-Verbal Divergent Production																																																		
19.	Fluency	.03	.14	-.16	-.10	-.16	.00	.02	.02	.04	-.03	.06	-.01	-.04	.22	.08	.10	.14	.09																																
20.	Activity	.11	-.00	-.02	.06	.02	-.03	-.03	-.00	.02	.11	.02	-.05	.02	-.04	-.07	-.06	-.06	-.05	-.04																															
21.	Flexibility	-.10	.01	-.07	-.08	-.10	-.07	-.04	-.08	-.04	-.13	.00	.05	-.14	.20	.18	.16	.17	.15	.47	.00																														
22.	Originality	.02	.11	-.06	-.07	-.15	.00	-.02	-.02	.01	-.04	.04	-.04	-.02	.24	.11	.12	.15	.11	.74	.02	.54																													
23.	Elaboration	.00	.07	-.10	-.07	-.11	.03	.06	.04	.08	-.05	.06	-.00	-.05	.30	.06	.07	.14	.09	.66	.11	.42	.60																												
24.	Title Adequacy	.03	-.10	.13	.14	.10	.14	.11	.10	.15	-.17	-.03	-.04	.02	.13	.01	.04	.06	.02	.07	.10	.17	.12	.16																											
	Behavior Rating of Pupils - Teacher Rating																																																		
25.	Gets into fights or quarrels	.17	.07	-.22	-.22	-.22	-.22	-.22	-.25	-.20	.34	-.05	.06	.22	-.03	-.02	-.03	-.02	-.01	.07	.04	-.05	.04	.08	-.10																										
26.	Has to be coaxed or forced to work or play	.09	.01	-.07	-.06	-.08	-.11	-.17	-.11	-.15	.00	.03	-.12	.11	-.08	-.08	-.10	-.09	-.06	.05	.04	-.08	.02	.00	.01	-.01																									
27.	Has difficulty learning	.19	.26	-.55	-.50	-.42	-.37	-.31	-.29	-.29	.26	.02	.14	.20	-.18	-.07	-.09	-.11	-.09	.09	.04	-.04	-.02	.04	-.13	.35	.84																								
28.	Makes unusual or inappropriate responses	.23	.11	-.25	-.21	-.19	-.18	-.21	-.18	-.19	.38	.03	-.04	.19	-.00	.04	.03	.05	.05	.08	.08	-.12	-.02	.06	-.00	.61	.05	.43																							
29.	Works extremely hard in learning	-.15	-.12	.34	.27	.26	.24	.24	.17	.21	-.37	-.01	-.05	-.26	.12	.05	.09	.07	.05	-.03	-.09	.12	.08	-.06	.13	-.49	-.14	-.54	-.56																						
30.	Behaves in ways which are dangerous	.19	.15	-.27	-.18	-.16	-.20	-.23	-.20	-.19	.40	-.02	.04	.25	-.04	-.03	-.03	-.01	-.01	.05	.07	-.09	.01	.05	-.17	.44	.06	.42	.69	-.55																					
31.	Unhappy or depressed	.14	.11	-.27	-.22	-.25	-.20	-.23	-.18	-.23	.30	-.02	.02	.20	-.13	-.04	-.06	-.06	-.03	.01	.12	-.15	-.00	-.03	-.11	.36	.38	.51	.46	-.46	.48																				
32.	Becomes upset or sick often	.11	.10	-.25	-.20	-.19	-.15	-.17	-.16	-.17	.24	.06	-.01	.18	-.10	-.06	-.08	-.08	-.06	.00	.05	-.08	-.02	-.05	-.12	.29	.40	.40	.36	-.37	.32	.59																			
	Class Play (Peer Rating)																																																		
33.	A true friend	-.11	-.00	.12	.02	.03	.10	.11	.10	.10	-.08	.03	.15	-.21	-.03	-.06	-.07	-.06	-.08	.02	-.06	.12	.04	-.00	-.00	-.32	-.18	-.18	-.38	.24	-.26	-.34	-.25																		
34.	Afraid-acts like small child	.12	-.00	-.02	-.00	-.03	.04	-.03	.03	.02	.14	-.04	.02	.15	-.01	-.04	-.00	-.02	-.02	.01	.03	-.06	-.02	.04	.05	.16	.20	.13	.23	-.09	.19	.21	.23	-.17																	
35.	A class president	-.17	-.11	.21	.16	.09	.12	.13	.09	.13	-.19	.03	-.01	-.21	.10	.01	.02	.04	.03	.05	-.06	.15	.06	-.00	.00	-.30	-.26	-.45	-.39	.38	-.34	-.42	-.33	.40	-.17																
36.	Stuck up-thinks he's better	.01	.01	-.03	-.03	-.02	-.01	-.01	-.04	.01	.19	.08	-.05	.09	.13	.10	.11	.13	.10	.08	-.08	-.02	.06	.03	-.08	.39	-.06	.03	.26	-.08	.22	.06	.17	-.18	.19	-.04															
37.	A mean, cruel boss	.05	.06	-.04	-.02	-.01	.04	.01	.06	.05	.17	.03	-.01	.06	.14	.08	.10	.14	.09	.06	-.03	-.06	.03	.08	-.11	.33	-.18	-.05	.26	-.11	.22	-.03	-.03	-.08	-.04	.05	.39														
38.	Team captain-well liked	-.07	-.03	.15	.08	.06	.10	.13	.10	.12	-.15	-.02	.08	-.21	.13	.06	.07	.10	.06	.02	-.07	.13	.09	.05	-.01	-.22	-.32	-.32	-.35	.29	-.25	-.32	-.31	.44	-.23	.47	-.04	.07													
39.	Someone who is smart	-.20	-.10	.30	.22	.19	.21	.21	.21	.23	-.14	-.06	.01	-.17	.09	.04	.05	.06	.03	-.02	-.12	.02	.01	-.02	-.01	-.30	-.07	-.48	-.32	.37	-.34	-.30	-.31	.22	-.01	.44	.03	.01	.27												
40.	Often gets angry-argues	.10	.10	-.19	-.14	-.13	-.11	-.09	-.11	-.09	.21	.04	-.02	.09	-.08	.04	-.08	.02	.03	-.03	.02	-.06	-.07	-.02	-.10	.43	-.01	.20	.38	-.04	.34	.21	.19	-.28	.11	-.19	.42	.31	-.19	-.13											
41.	Jolly-doesn't cause trouble	-.14	-.08	.18	.19	.09	.14	.12	.12	.14	-.15	.01	.01	-.17	.01	.00	-.00	-.02	-.02	.03	-.08	.09	-.00	.01	.06	-.41	-.10	-.22	-.35	.33	-.38	-.22	-.23	.22	-.16	.29	-.25	-.18	.23	.05	-.24										
42.	A bully	.12	.16	-.17	-.11	-.12	-.03	-.06	-.04	-.04	.17	-.05	.05	.10	-.04	-.06	-.06	-.03	-.07	.04	-.05	.06	-.02	.04	-.13	.44	-.02	.24	.38	-.29	.36	.15	.16	-.14	.12	-.20	.38	.40	-.11	-.14	.37	-.30									
43.	A helper--well liked	-.09	-.09	.10	.03	.09	.09	.09	.06	.07	-.25	.06	.05	-.15	.08	.05	.06	.07	.06	.01	-.06	.06	-.04	-.02	.14	-.43	-.19	-.29	-.36	.37	-.41	-.34	-.33	.31	-.15	.45	-.10	-.12	.36	.27	-.20	.35	-.27								
44.	A very lazy person	.15	.09	-.12	-.06	-.10	-.07	-.15	-.09	-.08	.23	-.00	-.09	.24	-.06	-.07	-.05	-.06	-.05	.02	-.02	-.15	-.04	.04	-.01	.29	.20	.29	.37	-.35	.37	.31	.20	-.28	.28	-.30	.13	.06	-.33	-.22	.21	-.17	.23	-.29							
45.	Plays games fairly	-.15	-.11	.11	.02	.02	.10	.14	.11	.08	-.22	.02	.00	-.16	.09	.08	.06	.08	.09	.01	-.08	.09	.04	.03	.11	-.31	-.16	-.24	-.35	.25	-.33	-.24	-.28	.32	-.14	.33	-.22	-.13	.34	.24	-.31	.30	-.24	.32	-.20						
46.	A nice pest	.15	.03	-.13	-.11	-.09	-.09	-.10	-.06	-.10	.14	-.01	-.01	.06	-.04	-.06	-.06	-.05	-.06	-.02	-.03	-.16	-.06	.02	-.14	.26	-.03	.14	.13	-.26	.13	.16	.17	-.16	.07	-.20	.17	.24	-.07	-.10	.27	-.17	.26	-.11	.16	-.10					
47.	Someone to direct the play	-.07	-.06	.19	.13	.10	.06	.06	.04	.05	-.12	.02	.02	-.10	.08	.04	.04	.06	.05	.02	-.02	.08	.00	-.04	.06	-.24	-.19	-.30	-.27	.29	-.28	-.28	-.26	.30	-.20	.47	-.07	-.00	.34	.18	-.22	.32	-.18	.37	-.28	.33	-.14				
48.	Always getting hurt	-.08	-.02	-.01	-.08	-.03	-.07	-.07	-.06	-.10	.06	-.01	.08	.09	-.02	-.04	-.06	-.05	-.05	.06	-.08	-.03	.02	.04	.06	.09	.12	.02	.09	-.08	.05	.15	.18	-.14	.26	-.17	.07	-.12	-.13	-.03	.03	-.05	.03	-.09	.03	-.06	.06	-.07			
49.	A school nurse or doctor	-.07	-.05	.06	.04	.01	.11	.10	.09	.10	-.14	-.03	-.01	-.04	-.02	-.02	-.03	-.04	-.14	.01	.01	.02	.02	.10	.05	-.21	-.07	-.21	-.20	.20	-.14	-.21	-.13	.16	-.04	.20	-.03	-.03	.16	.18	-.07	.07	.01	.19	-.06	.16	.02	.19	-.04		
50.	Always late for school	.17	.09	-.02	.01	.00	-.07	-.09	-.10	-.06	.17	.07	-.04	.03	-.03	-.04	-.02	-.02	-.03	.02	.09	-.06	-.03	.04	-.04	.22	.10	.10	.23	-.16	.21	.17	.17	-.17	.24	-.18	[illegible]	.13	-.18	-.10	.24	-.15	.17	-.14	.26	-.21	.09	-.21	.09	-.15	
	Self Rating																																																		
51.	Number of negative self selections on class play	.15	.10	-.19	-.08	-.11	-.09	-.13	-.10	-.08	.22	-.05	.04	.15	-.13	-.05	-.06	-.07	-.06	-.14	.01	-.11	-.14	-.07	-.09	.31	.01	.25	.18	-.29	.40	.27	.18	-.17	.16	-.25	.14	.10	-.16	-.10	.11	-.22	.25	-.26	.25	-.20	.14	-.16	.09	-.03	.14	

TABLE 33

FACTOR COEFFICIENTS FOR SELECTED SCHOOL DATA, TEACHER RATING, PEER RATING AND SELF RATING ON EACH FACTOR DIMENSION - 2nd GRADE GIRLS

Variable	Factor 1	Factor 2	Factor 3	Factor 4
1	-.142	.268	.014	.054
2	-.072	.130	-.283	.099
3	.028	-.318	.469	-.046
4	.051	-.276	.584	.020
5	-.027	-.121	.713	.011
6	.923	-.096	.100	-.005
7	.940	-.009	.002	-.023
8	.945	.028	-.040	.015
9	.927	.077	-.062	.012
10	-.147	.305	-.071	.117
11	-.104	.113	-.011	-.108
12	.003	.128	-.383	-.015
13	-.073	.541	.150	.288
14	.005	.581	.131	-.248
15	-.070	.671	-.249	-.023
16	-.038	.734	.035	.134
17	.074	-.397	.016	-.143
18	-.015	.640	.039	.108
19	.017	.725	.018	-.092
20	-.071	.721	.157	-.126
21	-.114	.300	.035	.564
22	-.079	-.091	-.034	.245
23	-.093	.285	-.021	.549
24	-.041	-.009	.089	.172
25	.039	-.181	-.017	.191
26	.001	.269	.031	.209
27	.044	-.176	.029	.172
28	-.136	.322	-.000	.508
29	-.090	-.361	-.045	.033
30	-.084	-.111	-.107	.175
31	.090	-.041	.124	-.015

TABLE 34

FACTOR COEFFICIENTS FOR SELECTED SCHOOL DATA, TEACHER RATING, PEER RATING AND SELF RATING ON EACH FACTOR DIMENSION - 2nd GRADE BOYS

Variable	Factor 1	Factor 2	Factor 3	Factor 4
1	-.234	.211	-.105	.043
2	-.019	.092	-.269	.190
3	.142	-.295	.465	.046
4	.103	-.219	.564	.013
5	-.006	-.110	.652	-.001
6	.929	-.082	.052	.028
7	.924	-.023	.036	.022
8	.943	.025	-.001	-.059
9	.930	.080	-.087	-.009
10	-.241	.358	-.141	.143
11	-.032	.103	-.061	-.012
12	-.003	.061	-.393	.057
13	-.224	.653	.170	.339
14	-.091	.486	-.039	-.217
15	-.327	.635	-.240	-.161
16	-.255	.759	.090	.062
17	.189	-.514	.088	-.067
18	-.223	.643	.103	.204
19	-.172	.622	.047	-.106
20	-.149	.574	.054	-.187
21	.091	-.400	.050	.124
22	.123	-.222	.005	.475
23	-.128	.379	.006	.462
24	.024	-.226	.039	.461
25	-.119	.298	-.118	.010
26	.055	-.248	.055	.185
27	-.053	-.017	-.100	.261
28	.023	.241	.045	.231
29	-.117	.305	-.007	.203
30	-.142	.327	-.022	.405
31	.090	-.139	.108	.047

TABLE 35

FACTOR COEFFICIENTS FOR SELECTED SCHOOL DATA, TEACHER RATING, PEER RATING AND SELF RATING ON EACH FACTOR DIMENSION - 5th GRADE GIRLS

Variable	Factor 1	Factor 2	Factor 3	Factor 4
1	.086	-.107	.288	.058
2	-.032	-.033	.107	-.044
3	.324	.181	-.204	-.041
4	.224	.120	-.176	-.069
5	.281	.197	-.271	-.072
6	.242	.890	.002	-.011
7	.134	.884	-.030	.006
8	.179	.895	.007	-.015
9	.169	.896	.021	.021
10	-.088	-.213	.279	-.119
11	-.085	-.107	.058	-.022
12	-.208	-.144	.042	.010
13	-.109	-.119	.131	-.025
14	.957	-.021	.044	.056
15	.776	.029	-.022	-.028
16	.907	-.002	-.027	-.022
17	.935	-.036	.030	.004
18	.860	.030	-.026	-.010
19	.347	-.175	.242	.707
20	.014	.142	.064	.102
21	.291	-.155	.082	.556
22	.337	-.166	.185	.765
23	.353	-.120	.020	.637
24	.300	.048	.010	.214
25	.047	-.154	.517	.026
26	-.130	-.161	.441	.027
27	-.209	-.310	.665	.088
28	.031	-.236	.673	-.045
29	.025	.258	-.625	.014
30	.048	-.217	.612	.013
31	-.079	-.191	.722	.003
32	-.048	-.228	.643	-.068
33	.068	.167	-.345	-.028
34	-.058	-.024	.186	-.005
35	.104	.131	-.453	.048
36	.085	-.053	.044	.041
37	.065	.018	-.414	-.103
38	.073	-.026	.062	.010
39	.142	.207	-.495	-.005
40	.043	-.034	.217	.072
41	-.063	.131	-.505	.005
42	.035	.107	-.543	-.036
43	-.015	-.088	.296	-.082
44	-.029	-.008	-.484	-.072
45	.016	-.089	.309	-.064
46	.156	.059	-.474	.028
47	.032	-.054	.212	-.083
48	.053	.113	-.352	.033
49	-.014	-.054	.149	.041
50	-.022	-.118	.377	.057

TABLE 36

FACTOR COEFFICIENTS FOR SELECTED SCHOOL DATA, TEACHER RATING, PEER RATING AND SELF RATING ON EACH FACTOR DIMENSION - 5th GRADE BOYS

Variable	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
1	.089	-.103	-.036	.234	.158
2	-.074	-.105	.120	.136	-.382
3	.119	.309	-.145	-.265	.555
4	.094	.315	-.119	-.167	.658
5	.078	.260	-.182	-.160	.572
6	.098	.909	-.016	-.003	.079
7	.031	.883	.010	-.032	-.082
8	.073	.923	-.016	.016	-.007
9	.121	.908	.021	.018	.010
10	-.092	-.246	-.072	.408	-.028
11	.009	-.105	.052	-.057	-.005
12	-.031	-.078	.005	-.014	-.323
13	-.072	-.091	-.066	.288	-.059
14	.850	.084	.148	-.024	.160
15	.963	-.038	-.018	-.010	-.055
16	.973	.021	-.012	-.005	.015
17	.965	.032	.043	.013	.056
18	.976	-.015	-.013	.002	-.016
19	.104	.014	.816	.062	-.045
20	-.061	-.003	.043	.108	.089
21	.171	-.077	.615	-.147	.001
22	.127	-.021	.815	.004	.026
23	.089	.053	.733	.082	.019
24	.033	.134	.173	-.138	.147
25	-.018	-.242	.047	.715	.028
26	-.082	-.139	.030	.116	.027
27	-.093	-.340	.036	.471	-.460
28	.043	-.212	-.009	.723	-.017
29	.064	.229	.034	-.617	.145
30	-.021	-.225	.007	.736	.005
31	-.051	-.227	-.077	.518	-.128
32	-.072	-.173	-.038	.448	-.105
33	-.062	.118	.070	-.439	-.097
34	-.017	.016	-.007	.264	.059
35	.024	.128	.085	-.530	.048
36	.112	-.021	.032	.373	.086
37	.107	.034	.022	.324	.018
38	.074	.115	.086	-.430	-.037
39	.045	.234	-.016	-.412	.115
40	.031	-.113	-.062	.458	-.072
41	-.010	.144	.048	-.525	.020
42	-.059	-.040	.015	.512	-.053
43	.059	.079	-.002	-.571	-.057
44	-.058	-.102	-.037	.436	.023
45	.078	.113	.045	-.465	-.092
46	-.059	-.089	-.064	.351	-.014
47	.048	.052	.016	-.467	.038
48	-.051	-.078	.038	.092	.068
49	-.032	.111	.052	-.238	-.038
50	-.029	-.082	-.005	.277	.114
51	-.063	-.105	-.142	.436	-.051

TABLE 37

INTERCORRELATIONS OF FIRST ORDER FACTORS FROM FACTOR ANALYSES OF SCHOOL-COLLECTED AND CLINICIAN-COLLECTED DATA
2nd GRADE GIRLS

	School Data				Psychologist's Test Results						Psychologist's Observations and Qualitative Judgments				Social Worker's Summary and Qualitative Judgments				Psychiatrist's Observations and Qualitative Judgments		
First Order Factor	1	2	3	4	1	2	3	4	5	6	1	2	3	4	1	2	3	4	1	2	3
School Data																					
1.Grades																					
2.Teacher rating of learning difficulties, inappropriate behavior, unpredictable behavior, crying and unhappiness, and gets upset easily	-.21																				
3.Ability and achievement test scores, occupation of father	.06	.04																			
4.Peer rating of fighting, aggressive behavior, and getting into trouble	.03	.13	-.00																		
Psychologist's Test Results:																					
1.Rorschach productivity with use of details	-.10	.08	-.16	.13																	
2.Immature intellectual development and poor visual motor control	.06	.37	-.27	.21	.07																
3.Rorschach productivity with whole responses, human and animal movement	-.07	.02	.02	-.00	-.27	-.11															
4.Verbal ability with aspects of compliancy	.07	-.34	.20	.17	-.05	-.19	.12														
5.Poor visual motor control and lagging development	.13	.30	-.09	-.01	.05	.11	.18	-.06													
6.Rorschach popular responses	.04	-.28	-.10	-.14	.07	-.14	-.03	-.01	-.15												
Psychologist's Observations and Qualitative Judgments																					
1.Intellectual functioning and its application	-.07	.30	-.21	-.12	.02	.46	-.19	-.52	.12	-.27											
2.Inappropriate behavior during testing	.22	.11	-.12	-.02	.01	.19	.12	-.17	.27	.04	.26										
3.Immaturity, personality constriction and visual motor difficulties	.15	.06	.03	-.16	-.14	.15	-.26	-.03	.18	-.25	.45	.03									
4.Good self control	.07	-.03	.16	-.04	.02	.04	-.32	.05	-.14	-.11	-.10	-.18	.25								
Social Worker's Summary and Qualitative Judgments																					
1.School maladjustment with emotional and social disturbance	-.09	.38	-.12	-.17	.07	.29	-.00	-.26	.08	-.17	.38	.25	.14	-.05							
2.Maladjustment with cultural deprivation	.05	.04	.22	.04	-.14	.02	.18	.17	-.00	-.22	.08	-.16	.16	-.02	.16						
3.Socio-economic status	-.04	.24	-.40	-.03	.17	.34	-.28	-.26	.16	.08	.20	.06	.18	.15	.22	-.21					
4.Social conflict	-.12	.01	.27	.01	.02	-.03	.06	.23	-.20	.04	-.14	-.21	.07	.15	.10	.10	-.12				
Psychiatrist's Observations and Qualitative Judgments																					
1.Inability to relate during interview	.12	.21	-.22	-.25	.01	.23	-.12	-.21	-.08	-.15	.43	.04	.27	.07	.30	.04	.05	-.02			
2.Retarded speech, immaturity, inability to communicate vs. verbal, mature, and manifest anger and resentment	-.15	.07	-.19	-.06	-.07	.21	-.14	-.24	.00	-.04	.12	-.26	.13	-.17	.17	-.06	.31	-.15	.02		
3.Hyperactivity vs. passivity during interview	-.20	-.09	.01	-.25	-.21	-.23	.15	-.08	-.20	-.04	.03	-.12	-.15	-.03	-.05	.03	-.30	-.16	.30	.05	

TABLE 38

INTERCORRELATIONS OF FIRST ORDER FACTORS FROM FACTOR ANALYSES OF SCHOOL-COLLECTED AND CLINICIAN-COLLECTED DATA
2nd GRADE BOYS

	School Data				Psychologist's Test Results							Psychologist's Observations and Qualitative Judgments				Social Worker's Summary and Qualitative Judgments				Psychiatrist's Observations and Qualitative Judgments		
First Order Factor	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	1	2	3
School Data																						
1.Grades																						
2.Teacher rating of learning difficulties, inappropriate behavior, unpredictable behavior, crying and unhappiness	-.65																					
3.Ability test scores, achievement test scores and occupation of father	.31	-.10																				
4.Peer ratings of fighting, aggressive behavior and getting into trouble	.07	.02	-.01																			
Psychologist's Test Results																						
1.Rorschach productivity with use of details	.24	-.22	.13	-.01																		
2.Verbal ability with aspects of compliancy	.49	-.37	.38	-.16	.12																	
3.Poor visual motor control and lagging development	.06	.12	.08	-.13	-.04	-.01																
4.Expansive and careless test behavior	-.11	.01	-.02	.04	-.04	.07	.08															
5.Rorschach productivity with use of whole responses, human and animal movement	-.09	.07	.07	-.17	-.04	.09	.00	.04														
6.Rorschach popular responses	.13	-.19	.22	-.02	.24	.11	-.05	-.03	-.04													
7.Lack of involvement in the the testing task	.10	-.03	.07	-.01	-.03	.00	.15	.08	.18	-.28												
Psychologist's Observations and Qualitative Judgments																						
1.Intellectual functioning and its application	-.62	.44	-.34	.14	-.17	-.74	.01	-.08	-.21	-.29	-.16											
2.Immaturity and personality constriction	-.20	.21	-.06	.01	-.25	-.06	.05	-.07	-.45	-.35	-.17	.43										
3.Self control	-.12	-.0[illegible]	.08	.16	-.02	-.01	-.12	-.08	.07	-.12	.02	-.09	-.29									
4.Perceptual difficulties with poor visual-motor ability	-.09	.32	.04	.02	.04	.00	.17	-.07	.21	-.36	.32	-.06	-.07	.05								
Social Worker's Summary and Qualitative Judgments																						
1.Maladjustment with cultural deprivation	-.05	.08	.03	-.16	.22	.03	-.04	-.02	.07	-.00	-.13	-.01	.03	.15	.33							
2.School maladjustment with emotional and social deprivation	-.42	.37	-.31	-.03	.01	-.45	-.14	-.03	-.01	-.09	.08	.32	.05	-.08	.05	.05						
3.Socio-economic status	-.22	.14	-.33	-.01	-.32	-.31	-.07	-.01	.01	-.01	-.11	.22	.03	.06	-.13	.01	.21					
4.Problems in adult-child relationships without adjustment difficulties	-.26	.25	.13	-.03	-.08	-.15	.13	-.14	.15	-.12	.06	.19	.02	.20	.05	-.10	.10	.21				
Psychiatrist's Observations and Qualitative Judgments																						
1.Inability to relate during interview	-.39	.19	-.12	-.00	.10	-.19	-.14	.01	.14	.01	-.06	.34	.07	-.05	-.08	.20	.39	.05	.09			
2.Manifest anger and resentment and many other symptoms	.03	.05	.06	.09	.03	.24	-.07	.20	.26	-.12	-.17	-.09	.03	.17	.08	-.05	-.23	-.16	-.03	.06		
3.Poor health	.22	-.09	.30	-.20	.11	.19	-.12	-.19	.10	.12	-.06	-.26	-.02	-.03	.13	.07	-.09	.01	.10	-.11	.06	

TABLE 39

INTERCORRELATIONS OF FIRST ORDER FACTORS FROM FACTOR ANALYSES OF SCHOOL-COLLECTED AND CLINICIAN-COLLECTED DATA
5th GRADE GIRLS

	School Data				Psychologist's Test Results							Psychologist's Observations and Qualitative Judgments					Social Worker's Summary and Qualitative Judgments					Psychi Observ and Qu Judgme
First Order Factor	1	2	3	4	1	2	3	4	5	6	7	1	2	3	4	5	1	2	3	4	5	1
School Data																						
1. Verbal divergent production																						
2. Grades, ability and achievement tests	.24																					
3. Teacher and Peer ratings as unhappy, often sick, learning problems and withdrawn	.16	-.34																				
4. Non-verbal divergent production	-.11	-.11	.10																			
Psychologist's Test Results																						
1. Rorschach productivity with the use of details	.23	-.14	.25	.03																		
2. Immature intellectual development and poor visual motor control	-.18	-.28	.16	.36	.08																	
3. Intelligence and verbal ability	.33	.37	-.16	-.22	.27	-.30																
4. Rorschach productivity with use of whole card, human and animal movement, and Bender inaccuracies	-.22	-.23	.15	.13	.19	.01	.03															
5. Bender drawings decreased in size and poor visual motor control	-.17	-.24	.03	.24	-.11	.13	-.10	-.05														
6. Rorschach popular responses	.22	-.01	-.00	-.02	.48	-.01	.04	-.29	-.00													
7. Bender drawings increased in size and poor visual motor control	-.09	-.18	.12	.15	.16	.14	-.17	.03	.04	.04												
Psychologist's Observations and Qualitative Judgments																						
1. Intellectual functioning and its application	-.30	-.36	.28	.21	-.06	.44	-.82	.01	.14	.03	.24											
2. Inappropriate behavior during testing	-.40	-.08	-.05	-.04	-.33	.08	-.41	-.03	-.03	-.24	-.06	.31										
3. Self control	-.01	-.08	-.25	-.01	.11	-.01	.09	-.06	.06	.18	-.13	-.18	-.25									
4. Immaturity and personality constriction	-.09	-.03	.21	.11	.28	-.06	-.02	.19	.09	-.00	-.16	.04	-.13	-.11								
5. Visual motor problems	-.15	-.17	.16	.11	.15	.14	-.08	-.02	.19	.19	.25	.15	-.11	-.01	-.03							
Social Worker's Summary and Qualitative Judgments																						
1. School maladjustment with cultural deprivation	-.32	-.22	.02	.13	.08	.00	-.08	.29	.24	.22	-.01	.12	.09	.22	.01	-.06						
2. School maladjustment with emotional and social disturbance	-.20	-.29	.33	.16	-.00	.25	-.44	-.03	-.02	.12	.11	.45	.10	-.15	-.03	.17	.20					
3. Socio-economic status	-.29	-.29	.02	-.01	-.07	.16	-.24	-.02	.15	-.08	.08	.14	.18	-.14	.01	-.06	-.01	.18				
4. School learning problems	-.22	-.18	-.13	.20	-.23	.05	-.36	.01	.28	-.10	.01	.20	.14	-.12	.10	-.12	-.18	.01	.24			
5. Problems in parent-child relations without adjustment difficulties	-.12	-.01	.11	-.04	-.11	.09	-.17	-.00	.16	-.01	-.12	.03	.12	-.13	.05	.08	-.04	.03	.13	.11		
Psychiatrist's Observations and Qualitative Judgments																						
1. Inability to relate during the interview	-.33	-.38	.21	.10	.15	.22	-.08	.28	.08	.05	-.02	.14	.11	.23	.06	-.09	.45	.10	.05	-.10	.12	
2. Immaturity and school problems	-.20	.03	-.11	.14	-.41	.13	-.22	-.20	.10	-.09	.06	.16	.10	.16	-.36	-.05	.09	.10	-.02	.14	-.05	.1
3. Hyperactivity vs. passivity during the interview	.09	.23	-.09	-.16	-.14	-.19	-.09	-.15	-.26	.15	-.07	-.02	-.06	-.10	.05	-.06	.09	.25	.02	-.08	-.07	-.0

TABLE 40

INTERCORRELATIONS OF FIRST ORDER FACTORS FROM FACTOR ANALYSES OF SCHOOL-COLLECTED AND CLINICIAN-COLLECTED DATA

5th GRADE BOYS

	School Data					Psychologist's Test Results							Psychologist's Observations and Qualitative Judgments				Social Worker's Summary and Qualitative Judgments				Psychiatrist's Observations and Qualitativ Judgments		
First Order Factor	1	2	3	4	5	1	2	3	4	5	6	7	1	2	3	4	1	2	3	4	1	2	3
School Data																							
1. Verbal divergent production																							
2. Grades	.28																						
3. Non-verbal divergent production	.28	.12																					
4. Teacher and peer ratings of acting out, non-liked and not fair	-.06	-.32	-.10																				
5. Ability and achievement test scores and age	.39	.10	.04	.12																			
Psychologist's Test Results																							
1. Intelligence and verbal ability	.29	.33	.01	-.20	.40																		
2. Rorschach productivity with use of small details	.03	-.13	-.14	.22	.24	.08																	
3. Perceptual difficulties with lack of visual motor control	.09	-.09	.04	.07	.12	-.01	.17																
4. Rorschach productivity with use of whole responses, human and animal movement	.10	-.09	.10	.18	.22	.25	.32	.06															
5. Too large vs. too small Bender figure	-.17	.06	.10	.02	.05	.05	-.12	-.02	.00														
6. Rorschach popular responses	.02	-.06	.09	.01	.20	-.03	.20	-.04	.02	.08													
7. Careless Bender with both too large and too small reproductions	-.09	-.00	.02	.12	.03	.02	.20	.00	.01	-.04	-.10												
Psychologist's Observations and Qualitative Judgments																							
1. Intellectual functioning and its application	-.23	-.38	-.10	.31	-.18	-.65	.10	.07	-.02	-.17	-.17	.06											
2. Inappropriate behavior during testing	.01	-.08	-.11	.00	-.07	-.17	.03	.32	-.18	-.14	-.08	-.20	.37										
3. Immaturity, personality constriction and visual motor difficulties	.03	-.09	.03	-.02	.03	.19	.12	.11	.24	.22	-.09	-.06	.14	.13									
4. Good self control	-.17	-.08	-.04	-.02	-.06	-.19	-.09	-.11	.05	.08	.13	-.14	.20	.05	.09								
Social Worker's Summary and Qualitative Judgment																							
1. School maladjustment with emotional and social disturbance	.05	-.05	.12	.24	.18	.15	.27	.03	.29	-.06	.13	.21	-.00	-.10	-.08	-.22							
2. Maladjustment with cultural deprivation	-.02	-.24	.09	.18	-.05	-.21	-.05	-.10	.09	-.13	.12	.00	.25	-.01	-.12	.24	.27						
3. Socio-economic status	-.16	-.16	-.01	.10	-.29	-.49	-.24	-.13	-.10	.04	.10	.06	.21	-.01	-.07	.23	-.15	.12					
4. Social conflict	.03	.09	-.08	-.06	.03	.10	-.07	-.07	.02	.05	.01	-.16	-.05	.19	-.06	.01	-.18	.09	-.11				
Psychiatrist's Observations and Qualitative Judgments																							
1. Inability to relate during interview	-.21	-.32	-.13	.26	-.08	-.20	.04	-.04	.10	.08	-.02	.03	.11	-.12	-.23	.04	.12	-.01	.16	.00			
2. Retarded speech, immaturity, inability to communicate vs. verbal, mature, and manifest anger and resentment	-.00	-.03	.08	.06	-.06	-.35	-.06	-.13	-.25	-.13	.11	-.03	.19	.20	-.29	.12	-.05	.10	.21	.04	.13		
3. Hyperactivity vs. passivity during interview	.09	.19	.15	-.29	.10	.18	-.18	-.30	-.13	.03	.19	.02	-.30	-.20	-.14	-.05	-.13	-.28	-.13	-.00	.02	.11	

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Table 41

FACTOR LOADINGS OF KEY CLINICAL VARIABLES ON SUMMARY FACTORS
2ND GRADE GIRLS

		Summary Factors			
No.	First Order Factors	I	II	III	IV
	SCHOOL DATA:				
1.	Grades	.092	-.019	.031	.149
2.	Teacher rating of learning difficulties, inappropriate behavior, unpredictable behavior, crying and unhappiness, and gets upset easily	.031	.505	-.153	.210
3.	Ability and achievement test scores, occupation of father	.540	-.230	.067	-.009
4.	Peer rating of fighting, aggressive behavior, and getting into trouble	.050	-.130	-.090	.374
	PSYCHOLOGIST TEST RESULTS:				
1.	Rorschach productivity with use of details	-.246	-.001	.106	.227
2.	Immature intellectual development and poor visual motor control	-.134	.518	.023	.320
3.	Rorschach productivity with whole responses, human and animal movement	.218	-.123	-.640	-.108
4.	Verbal ability	.361	-.490	.042	.136
5.	Poor visual motor control and lagging development	-.003	.240	-.308	.304
6.	Rorschach popular responses	-.360	-.345	.014	-.054
	PSYCHOLOGIST'S OBSERVATIONS AND QUALITATIVE JUDGMENTS:				
1.	Intellectual functioning and its application	-.053	.818	.034	-.067
2.	Inappropriate behavior during testing	-.119	.246	-.335	.177
3.	Immaturity, personality constriction and visual motor difficulties	.257	.442	.362	.089
4.	Good self control	.167	-.014	.534	.074
	SOCIAL WORKER'S SUMMARY AND QUALITATIVE JUDGMENTS				
1.	School maladjustment with emotional and social disturbance	.007	.544	-.067	.040
2.	Maladjustment with cultural deprivation	.489	.110	-.063	-.027
3.	Socio-economic status	-.497	.329	.255	.332
4.	Social conflict	.310	-.129	.178	.084
	PSYCHIATRIST'S OBSERVATIONS AND QUALITATIVE JUDGMENTS:				
1.	Inability to relate during interview	.026	.517	.157	-.317
2.	Retarded speech, immaturity, inability to communicate vs verbal, mature, and and manifest anger and resentment	-.261	.215	.106	-.073
3.	Hyperactivity vs passivity during interview	.030	.019	-.091	-.768

Table 42

FACTOR LOADINGS OF KEY CLINICAL VARIABLES ON SUMMARY FACTORS
2ND GRADE BOYS

No.	First Order Factors	Summary Factors I	II	III	IV
	SCHOOL DATA:				
1.	Grades	-.793	-.067	.141	.196
2.	Teacher rating of learning difficulties, inappropriate behavior, unpredictable behavior, crying and unhappiness	.585	.120	-.378	-.163
3.	Ability test scores, achievement test scores and occupation of father	-.451	-.001	-.117	-.202
4.	Peer ratings of fighting, aggressive behavior and getting into trouble	.061	.028	.076	.188
	PSYCHOLOGIST'S TEST RESULTS:				
1.	Rorschach productivity with use of details	-.218	-.173	.105	-.289
2.	Verbal ability	-.764	.061	-.091	-.205
3.	Poor visual motor control and lagging development	-.052	.075	-.212	.147
4.	Expansive and careless test behavior	-.011	-.034	-.027	.053
5.	Rorschach productivity with use of whole responses, human and animal movement	-.016	-.455	-.346	-.177
6.	Rorschach popular responses	-.196	-.267	.510	-.282
7.	Lack of involvement in the testing task	-.067	-.207	-.401	.322
	PSYCHOLOGIST'S OBSERVATIONS AND QUALITATIVE JUDGMENTS:				
1.	Intellectual functioning and its application	.796	.328	.065	.081
2.	Immaturity and personality constriction	.188	.907	[illegible]	-.019
3.	Self control	-.050	-.220	-.10[illegible]	.035
4.	Perceptual difficulties with poor visual motor ability	.012	-.056	-.709	-.079
	SOCIAL WORKER SUMMARY AND QUALITATIVE JUDGMENTS:				
1.	Maladjustment with cultural deprivation	.031	-.021	-.154	-.390
2.	School maladjustment with emotional and social deprivation	.576	-.116	.000	-.087
3.	Socio-economic status	.367	-.063	.124	.127
4.	Problems in adult-child relationships without adjustment difficulties	.224	-.061	-.195	-.005
	PSYCHIATRIST'S OBSERVATIONS AND QUALITATIVE JUDGMENTS:				
1.	Inability to relate during interview	.417	-.061	.050	-.364
2.	Manifest anger and resentment and many sumptoms	-.147	.043	-.166	-.166
3.	Poor health	-.262	-.022	-.074	-.254

Table 43

FACTOR LOADINGS ON KEY CLINICAL VARIABLES ON SUMMARY FACTORS
5TH GRADE GIRLS

No. First Order Factors	Summary Factors I	II	III	IV
SCHOOL DATA:				
1. Verbal divergent production	.353	.324	.438	-.220
2. Grades, ability and achievement tests	.471	-.211	.370	-.180
3. Teacher and peer ratings as unhappy, often sick, learning problems and withdrawn	-.332	.432	.023	.193
4. Non-verbal divergent production	-.291	.063	-.158	.040
PSYCHOLOGIST'S TEST RESULTS:				
1. Rorschach productivity with the use of details	.113	.834	-.111	.007
2. Immature intellectual development and poor visual motor control	-.458	.089	-.149	-.007
3. Intelligence and verbal ability	.846	.213	.008	.019
4. Rorschach productivity with use of whole card, human and animal movement, and Bender inaccuracies	.023	.157	-.349	.488
5. Bender drawings decreased in size and poor visual motor control	-.194	-.048	-.229	.068
6. Rorschach popular responses	.002	.4[illegible]3	-.052	-.496
7. Bender drawings increased in size and poor visual motor control	-.276	.159	.026	-.066
PSYCHOLOGIST'S OBSERVATIONS AND QUALITATIVE JUDGMENTS:				
1. Intellectual functioning and its application	-.845	.000	-.035	-.007
2. Inappropriate behavior during testing	-.314	-.406	-.047	.182
3. Self control	.235	.017	-.418	-.338
4. Immaturity and personality constriction	-.002	.272	-.003	.358
5. Visual motor problems	-.226	.24[illegible]	.022	-.096
SOCIAL WORKER'S SUMMARY AND QUALITATIVE JUDGMENTS:				
1. School maladjustment with cultural deprivation	-.085	.067	-.640	-.110
2. School maladjustment with emotional and social disturbance	-.562	.127	-.027	-.137
3. Socio-economic status	-.293	-.113	-.037	.180
4. School learning problems	-.275	-.275	.045	.187
5. Problems in parent-child relations without adjustment difficulties	-.135	-.066	-.003	.160
PSYCHIATRIST'S OBSERVATIONS AND QUALITATIVE JUDGMENTS:				
1. Inability to relate during interview	-.134	.100	-.681	.072
2. Immaturity and school problems	-.190	-.445	-.192	-.368
3. Hyperactivity vs passivity during the interview	.009	-.057	.163	-.235

Table 44

FACTOR LOADINGS OF KEY CLINICAL VARIABLES ON SUMMARY FACTORS
5TH GRADE BOYS

No. First Order Factors	Summary Factors I	II	III	IV
SCHOOL DATA:				
1. Verbal divergent production	-.455	-.136	.263	.266
2. Grades	-.499	.270	.149	.045
3. Non-verbal divergent production	-.162	-.022	.176	-.024
4. Teacher and peer ratings of acting out, not-liked and not fair	.326	-.489	-.039	-.035
5. Ability and achievement test scores and age	-.428	-.375	.102	.098
PSYCHOLOGIST'S TEST RESULTS:				
1. Intelligence and verbal ability	-.831	-.109	-.198	-.038
2. Rorschach productivity with use of small details	-.055	-.540	-.121	.109
3. Perceptual difficulties with lack of visual motor control	-.015	-.192	-.179	.381
4. Rorschach productivity with use of whole responses, human and animal movement	-.146	-.469	-.260	-.090
5. Too large vs too small Bender figure	-.065	.120	-.226	-.209
6. Rorschach popular responses	-.051	-.136	.220	-.132
7. Careless Bender with both too large and too small reproductions	.019	-.216	.001	-.176
PSYCHOLOGIST'S OBSERVATIONS AND QUALITATIVE JUDGMENTS:				
1. Intellectual functioning and its application	.712	-.159	-.075	.322
2. Immaturity, personality constriction and visual motor difficulties	.220	.089	.002	.705
3. Distractibility and lack of self control	-.086	-.021	-.530	.192
4. Inappropriate behavior during testing	.265	.127	-.036	-.039
SOCIAL WORKER'S SUMMARY AND QUALITATIVE JUDGMENTS:				
1. School maladjustment with cultural deprivation	-.081	-.607	.104	-.120
2. School maladjustment with emotional disturbance	.288	-.240	.143	-.011
3. Socio-economic status	.484	.165	.094	-.181
4. Social problems without adjustment difficulties	-.066	.119	.835	.139
PSYCHIATRIST'S OBSERVATIONS AND QUALITATIVE JUDGMENTS:				
1. Inability to relate during interview	.303	-.171	.043	-.290
2. Immaturity with related school problems	.302	.086	.556	.084
3. Negative reciprocal relationship between psychiatrist and child	-.316	.277	.293	-.266

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